

THE **CANADIAN HOSPITAL**

**OFFICIAL JOURNAL
CANADIAN HOSPITAL COUNCIL**

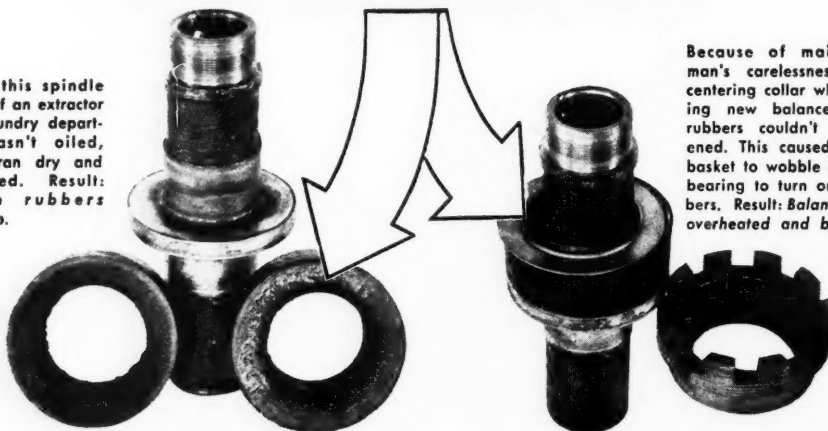
JUNE, 1944

BOMBER GROUNDED!



BECAUSE PRECIOUS RUBBER WAS BURNED UP

Because this spindle bearing of an extractor in the laundry department wasn't oiled, bearing ran dry and overheated. Result: Balance rubbers burned up.



Because of maintenance man's carelessness in not centering collar when installing new balance rubbers, rubbers couldn't be tightened. This caused extractor basket to wobble badly and bearing to turn on the rubbers. Result: Balance rubbers overheated and burned up.

● Bomber grounded!! Extractor in the laundry shut down! Both because critically needed rubber was wastefully destroyed.

Someone should have taken a few minutes to oil the spindle bearing of that extractor. Nobody did.

It would have taken just a few seconds more for the maintenance man who installed new balance rubbers to do the job right. But, he didn't.

So a badly needed extractor was shut down . . . and a bomber grounded.

There must be no breakdowns now. Every machine in your laundry department must be given proper maintenance care to keep it operating for the duration. **LET'S WORK TOGETHER.**

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The CANADIAN HOSPITAL



An X-ray Chest Film of Every Hospital Patient?

When tuberculosis specialists suggest that an X-ray chest study be made of every patient entering the hospital, it is in light of statistics obtained from various mass X-ray chest surveys conducted within recent years.

Because these surveys have proved so successful in uncovering unsuspected cases of tuberculosis and removing them from circulation, it is believed that "the general hospital, in its most modern concept as a health center, can ill afford to neglect such a program of preventative medicine." Also stressed, is its effectiveness in thus minimizing the incidence of tuberculosis among nurses, internes, and other hospital personnel.

A few years ago this suggestion would have been deemed impractical, because it then involved the use of

14"x17" X-ray films, the high cost of which precluded the financial ability of most hospitals to support such a program. But since the development of photo-roentgen apparatus which utilizes miniature-size film for X-ray chest examinations, thereby reducing material costs to a small fraction, the feasibility of mass chest surveys has become widely recognized.

It is in view of this definite trend that hospital administrators today are interested in evaluating photo-roentgenography, usually with the thought of listing this as another phase of hospital service to be considered in their current planning for the postwar period.

The hundreds of G-E Photo-Roentgen Units in use today, which have contributed in large measure to the gratifying results obtained in mass chest surveys in many sections of the United States and Canada, represent a background of experience which is at once an assurance of practical design and reliable, efficient performance.

We shall be glad to send you a number of interesting reprints of authentic articles, to help you evaluate photo-roentgenography in its various applications. Address Dept. K86.



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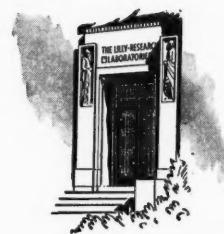
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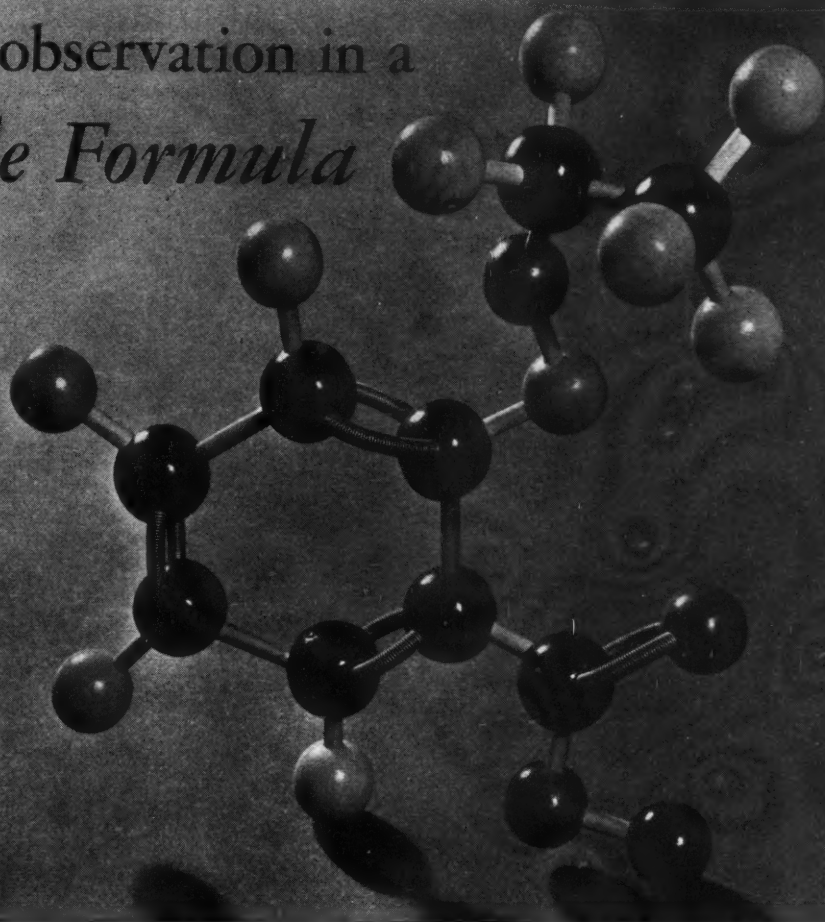
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Q. When I serve a dish of canned peas or spinach or some other canned vegetable to a patient, how can I know how much ascorbic acid the patient is getting?

A. I couldn't assign a definite numerical value. All vegetables have an upper and lower limit of ascorbic acid content. This probably is also true for their other essential nutrients. The ascorbic acid content of a given sample is determined by a number of factors, like variety, state of maturity when picked, soil, weather, and what happens to the vegetable between the time it is harvested and served to the patient. It is very likely that canned vegetables are fully equal in ascorbic acid content to kitchen-prepared vegetables. I suggest you be guided by reliable publications on the ranges of vitamin contents in canned foods. (1)

*American Can Company, Hamilton, Ontario;
American Can Company Ltd., Vancouver, B.C.*

- (1) 1936. Food Research 1, 3
1936. Ibid 1, 231
1938. Nutrition Abstracts and Reviews 8, 281
1939. Canned Food Reference Handbook, American
Can Company, Hamilton, Ont.
1940. J. Am. Diet. Assoc. 16, 891

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The CANADIAN HOSPITAL

Across the Desk

By C. A. E.

Wide Vistas for the Record Librarian

COMPARATIVELY few young women realize that there is a widespread demand for trained personnel to organize and direct medical record libraries; that a very attractive vocation is open to them with all the advantages in choice of location and worth-while salaries that go with a new profession.

The young nurse who has just completed her training has obtained an excellent background for this work. Her knowledge of nursing, medical terms, treatments and hospital routines are all valuable assets of the record librarian. In addition, her liking for service in the broad field of public health is a factor of importance. About all that needs to be added before entering a course in medical record keeping is a knowledge of shorthand and typing. It is necessary, obviously, to take a course in medical record work before accepting an appointment.

A number of hospitals have learned that June is a good month to explore the prospects of developing record librarians from their new class of nurse graduates.

* * * *

Deliveries Unlimited

Babies are born under circumstances which are sometimes amazing and sometimes amusing. A baby girl born in a 2½ ton truck as it sped on its way to a Chicago hospital, bore an unusual distinction. Unable to obtain a taxicab, the frantic father borrowed a truck from his boss, the head of a cartage company. Fittingly lettered on the truck's sides was the proud slogan of the concern: "We deliver anything".

* * * *

A Good Balance is Important

In the pre-war years fatalities resulting from automobile accidents led as a cause of accidental deaths in North America. Today, falls cause more deaths than any other hazard. Simple falls on the floor, steps and stairs account for most deaths, according to the Metropolitan Life Statistical Bulletin. Chores on ladders apparently are not as dangerous as one might think, nor is tree climbing.

A thought for the nurse: About 60% more females pass on from falling out of bed, than males.

* * * *

Rev. Alan Greene's Eastern Trip

Rev. Alan Greene, superintendent of the Columbia Coast Mission and its hospitals at Alert Bay, Rock Bay and Garden Bay, has returned to Vancouver after spending six weeks in the East.

When Mr. Greene reached a city on one of his tours, with all his moving picture gear and other impedimenta, many people imagined he had arrived like a travelling circus for a week's stay. But they were always assured that his is only a one-night stand. Any money he takes out of a town goes chiefly to the general funds of the Missionary Society of the Church of England in Canada, which is giving such splendid service to the residents of the West Coast.

Interesting Facts about laxation and "bulk"



TWO important facts about ALL-BRAN are of much interest. (1) The comparative effectiveness of ALL-BRAN's cellulosic bulk, against that of other bulk-forming foods. (2) The action of ALL-BRAN's bulk in the colon compared to other laxatives operating on various bulk principles.

COMPARISON WITH BULK EFFECT OF OTHER FOODS. In a University test among chemistry students—on controlled diets containing theoretically equalized amounts of crude fibre—ALL-BRAN proved more effective in bulk-forming properties and satisfactory laxative action than most fruits and vegetables.

COMPARISON WITH OTHER BULK LAXATIVES. It is generally known ALL-BRAN does not get laxative action by great distension in the colon. It works by preparing wastes, rather than propelling them. For ALL-BRAN is one of nature's most effective sources of cellulosic elements which help friendly flora to fluff up and soften colonic wastes for easy, natural elimination.

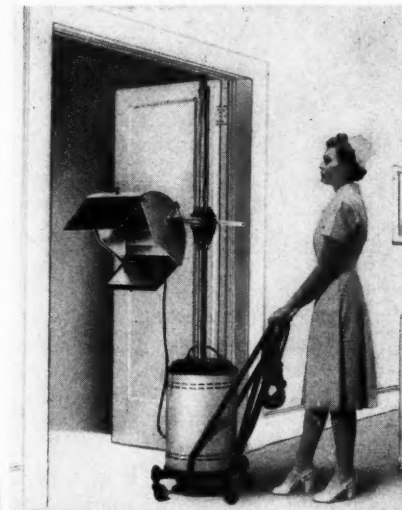
Many doctors, therefore, find it advisable to suggest KELLOGG'S ALL-BRAN in cases of constipation due to lack of bulk in the diet.

Full reports of experiments are available to doctors and others interested. Please send request to:

KELLOGG COMPANY OF CANADA LTD., LONDON, ONT.

Note THESE EXTRAORDINARY FEATURES
OF THE
**PORTABLE WARD MODEL
LUXOR "S"
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The Portable Ward Model Luxor "S" Alpine Lamp offers unusually high quality and utility. Its improved no tilting, fast burning quartz burner delivers ultra-violet rays of short, medium and long wavelengths, for all therapeutic applications. The burner builds up rapidly to full intensity, and cools quickly ready for relighting. It provides intense radiation and even distribution over a wide shadowless surface. Its special portability fulfills the requirements of the patient who is in need of ultraviolet light treatment at his bedside—too ill to be moved. Compact and mobile. Can be taken along any corridor, through any doorway, in any elevator and into the smallest room. Especially valuable in the treatment of erysipelas cases. Available for operation on either alternating or direct current.



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Courage!

We are in receipt of a copy of Vol. V No. 1 of "Courage", published by The National Foundation for Infantile Paralysis, Inc., New York. Peter J. A. Cusack is the Editor.

This magazine of 72 pages and cover is beautifully printed on coated paper, with cover in full colours. The editorial contents include a number of excellent articles by well-known medical authorities and laymen. Among the contributors are: Basil O'Connor (President of the Foundation), Mary Pickford (Chairman of Women's Division), Grantland Rice, John C. Curran, M.D. and Editor Cusack. A message from President Roosevelt is the lead feature of an interesting and inspiring number of the magazine.

* * * *

Oakite Wartime Service

Concurrently held in New York, Chicago and Los Angeles were the Oakite Third War Production Conferences on cleaning, de-scaling, de-rusting, de-greasing and related production and maintenance operations. Participating in the meetings were the technical staffs of Oakite Products of Canada, Ltd.

Of particular interest to hospital superintendents and dietitians were the information and data exchanged by the technical service representatives revealing many time and effort-saving techniques on such hospital maintenance tasks as de-scaling sterilizers, autoclaves, dishwashing machines, steam tables, coffee urns, steam-jacketed kettles, refrigerant condensers and other water-cooled and water-circulating equipment; stripping paint from metal furniture before repainting; soap saving in laundry department; keeping floors clean and non-slippery; washing walls and woodwork.

Data and information resulting from the discussions held at the various meetings are freely available to all through the medium of the Oakite technical field service.

* * * *

Sterilizer Engineer Dies

Funeral services for William A. Wiley, internationally known sterilizer engineer with the Wilmot Castle Company, Rochester, N.Y., were held in Erie, Pa., Monday, April 17, 1944, where he was born 68 years ago.

Starting his career at 17 with the American Sterilizer Company in Erie, he developed many improvements in sterilizer equipment. He operated his own business in California for several years, then joined Wilmot Castle Company as chief engineer in 1928.

Probably no man in the Castle organization ever earned more regard and deep respect than Mr. Wiley due to kindly disposition and his ability in his chosen field of labour.

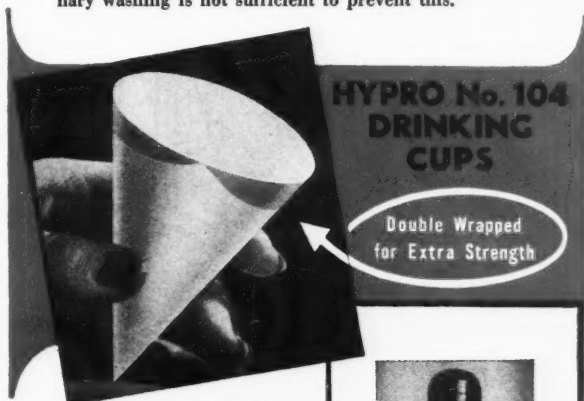
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Benjamin Franklin's Bifocals

At the age of 78 Benjamin Franklin invented bifocal glasses because: "Before that year I had used two pair of spectacles which I shifted occasionally as in traveling I sometimes read and often wanted to regard the scenery. Finding this change troublesome and not always sufficiently ready, I had the glass cut and half of each kind (of lens) associated in the same circle."—*Urologic and Cutaneous Review*.



Millions of dollars in man hours lost can be saved by foresighted employers who equip their plants and offices with No. 104 Hypro Sanitary Drinking Cups! There is no more certain way of communicating contagious or infectious diseases than by means of the common drinking glass, or the "bubbler fountain". Even careful, ordinary washing is not sufficient to prevent this.



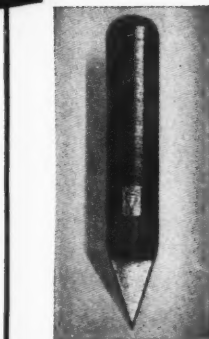
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Hypro Cup No. 104 Cup Dispenser illustrated above is a convenient, one-at-a-time dispenser, which prevents handling, and saves on use. Attractive dull black finish, 12 3/4 inches high, 2 3/8 inches in diameter, projecting 3 3/4 inches from wall when installed on bracket.

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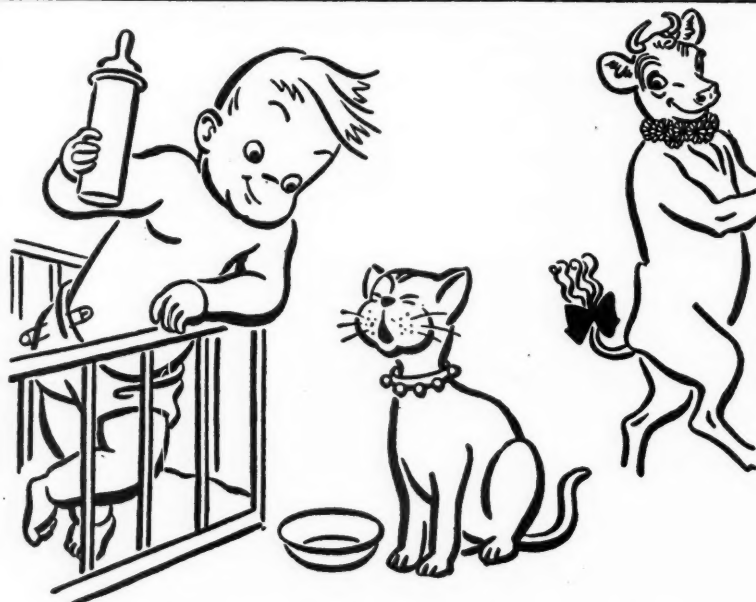
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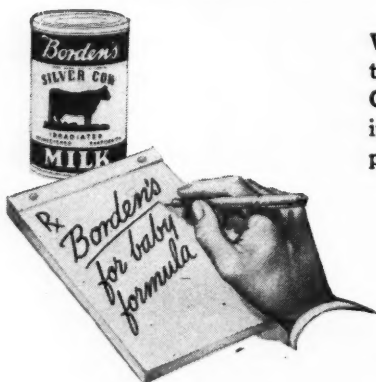
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Hospital Pharmacy Objective

"Obviously the hospital pharmacy is more than a place for the dispensing of drugs. In a sense it is a mirror which reflects the practice of that particular hospital, and as such it should be the interest of all hospital departments. If this interest is not made evident, the pharmacy cannot be expected to function as it should. It will be no more than a tap to be turned on and off at will when a pill or powder is needed."—*Dr. Austin E. Smith, Secretary of the A.M.A. Council on Pharmacy and Chemistry.*

* * * *

Cacoprene D-R Catheters

Cacoprene D-R Catheters, a new development in catheter manufacture, are products of demi-rigid synthetic rubber. They are intended for use where silk woven catheters are now used. Cacoprene is a special formula of Neoprene which looks and feels like rubber. It is the result of years of research for a material that would provide the resilience, texture and other desirable properties of rubber for surgical purpose and, in addition, would have improved resistance to deterioration from boiling, chemical decomposition and oxidation.

Cacoprene Catheters will withstand repeated sterilizations, exposure to body oils, greases, chemical action and still retain their size, shape and flexibility. Cacoprene catheters are characterized by a heavy black indelible band near the funnel end. They have large smooth eyes for efficient drainage. This product is available from Clay-Adams Co., Inc., New York 10, N.Y.

* * * *

13 Ways to Save Paper

1. Use standard record forms and avoid waste in printing uneconomical sizes. (See article in May, 1944, issue of the Canadian Hospital on "Condensation of Clinical Charts.")
2. Use lightest practical weights and buy only in quantities urgently needed.
3. Use $\frac{1}{2}$ and $\frac{3}{4}$ size letterheads for short letters, also smallest practicable size envelopes.
4. Eliminate inventory and distribution waste.
5. In correspondence avoid retyping letters by making minor changes with pen or typewriter; eliminate extra file copies.
6. For the same letter to several persons, make only one copy, adding thereon names of other addresses.
7. Consult printer in preliminary stage and place order early to promote economy in production.
8. Use carbon paper so long as it produces legible copies and re-use file folders, index folders and file guides.
9. Substitute postcards for letters where possible—also use reverse side of incoming letter for carbon copy of reply.
10. Scratch pads, smaller and more strictly rationed to be made from obsolete forms and waste paper; cooperate fully with all paper salvage programs.
11. Smaller paper surface printed in colour may be as effective as larger surface printed in black.
12. French folds (printed on one side of sheets with other side blank) should be eliminated.
13. Employ inter-office or inter-departmental envelopes, having numerous spaces for name and address, for use over and over again.

JUNE, 1944

When Ordering Your Supplies from Stafford's . . . Ask for a Share of the Limited Quantity of . . .

STAFFORD'S BASIC JELLY POWDER

- It's a NEW product.
- It's different . . . It's delicious.
- A little goes a long way.
- True-fruit flavor.

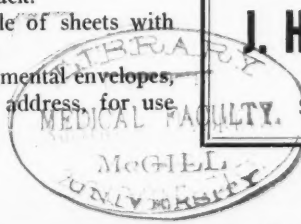


EMPHASIS is being laid upon the importance of basic jelly powder in hospital diets. Stafford's are filling this need within limits of existing conditions. Our fair methods of allocating available stocks will entitle you to a share of Stafford's rich, delicious jelly base along with your order of other Stafford's food products made up especially for hospital use. Stafford's NEW basic jelly powder is easier to make . . . has the true flavor of raspberry, wild cherry, strawberry, orange, lemon and lime.

For something different in desserts, serve Staffex Custard Powders in a variety of popular flavors. BAKER'S CONCRETE FLAVORS for flavoring bake goods, syrups, sauces, meats and soups. Try the NEW Karmella flavor.

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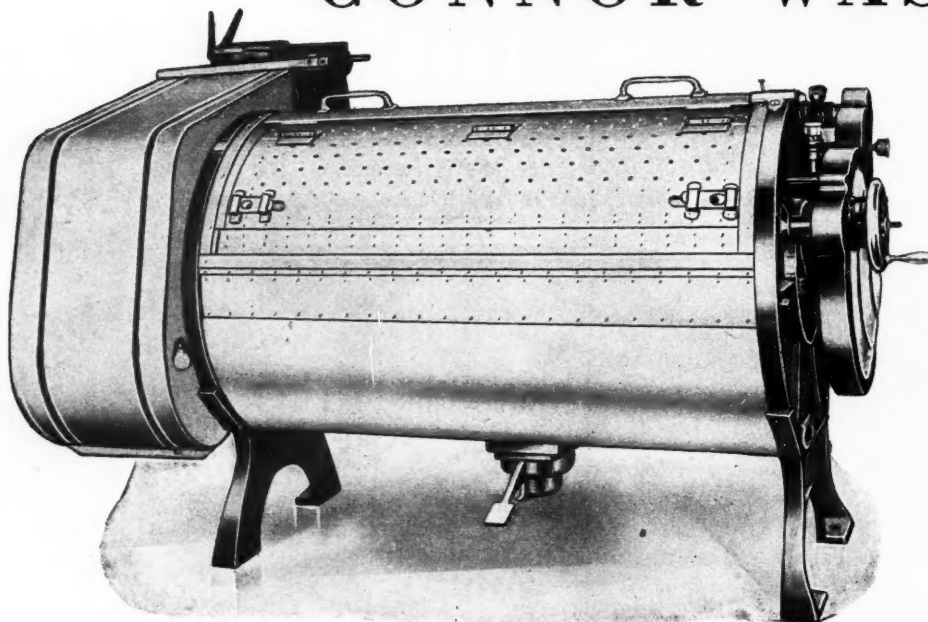
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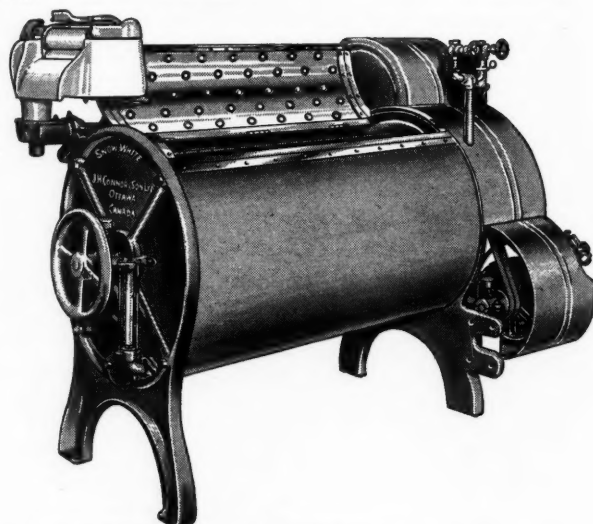
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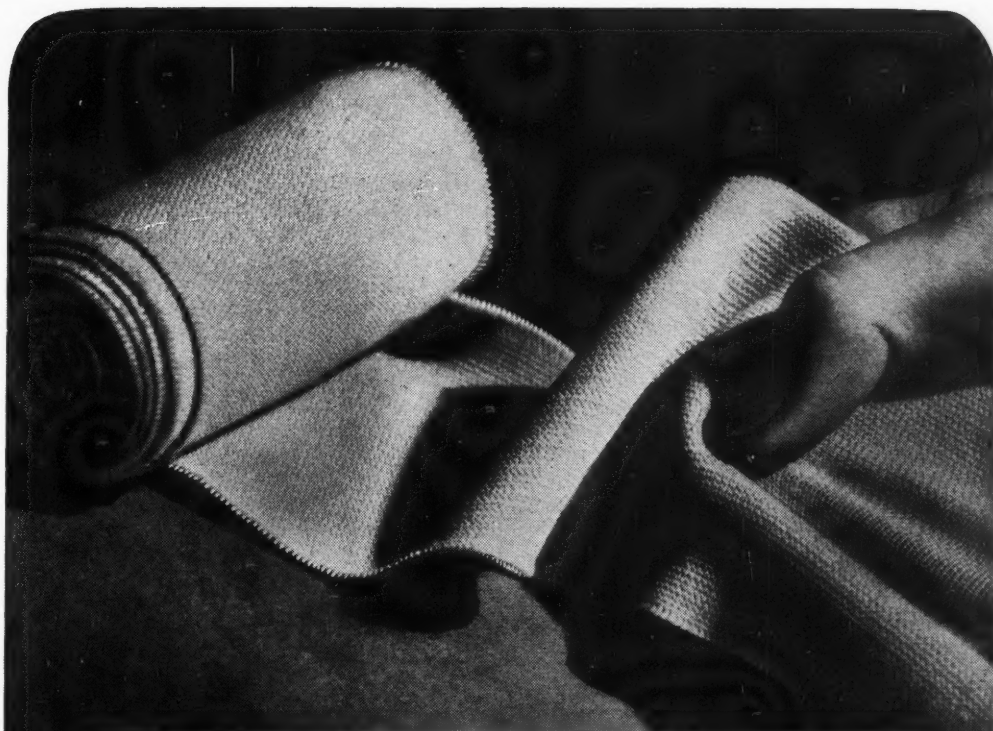
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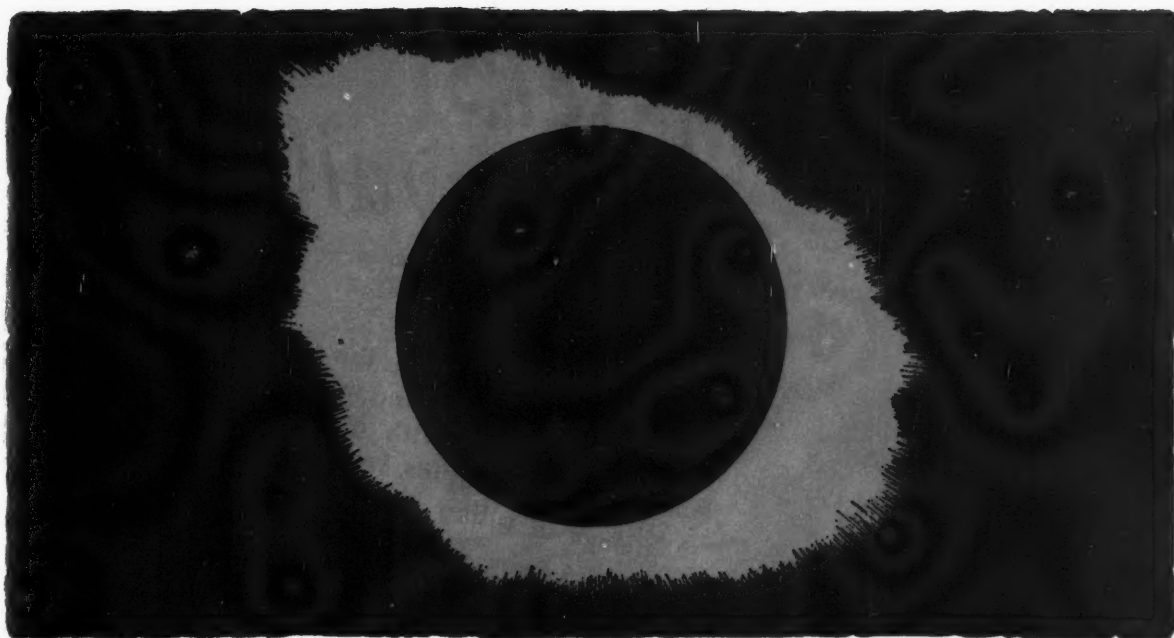
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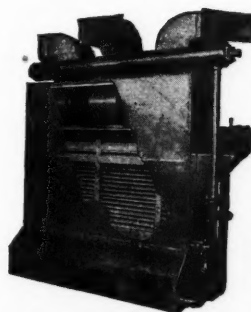
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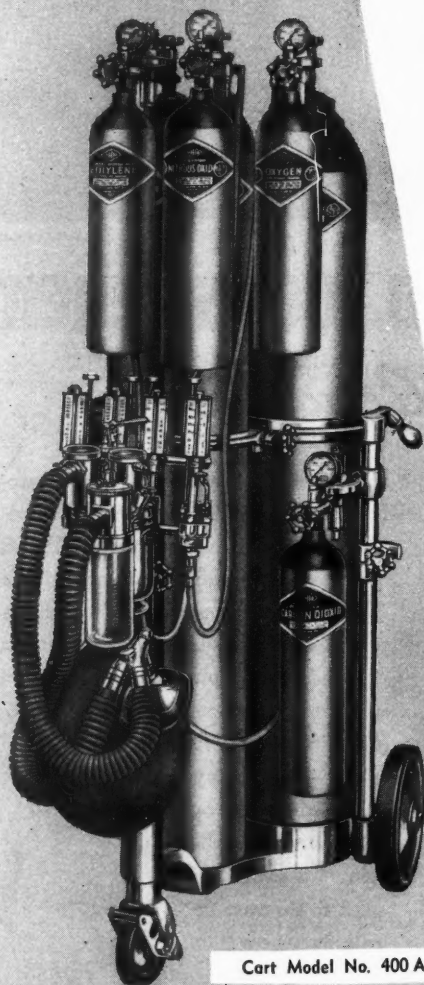
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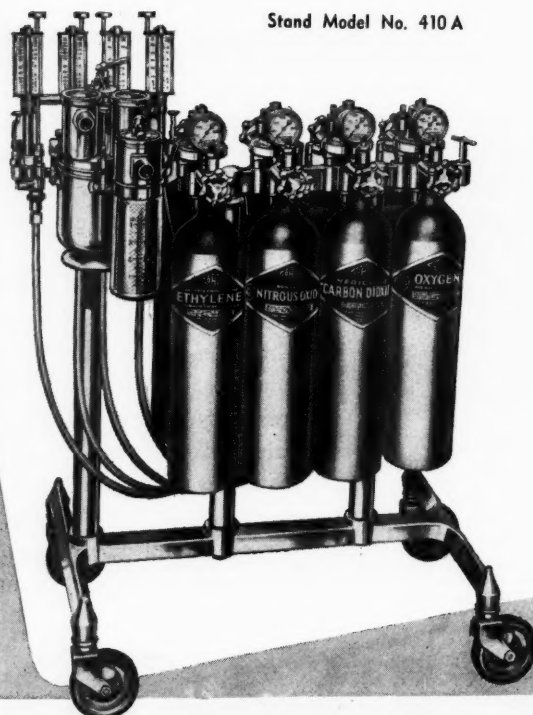
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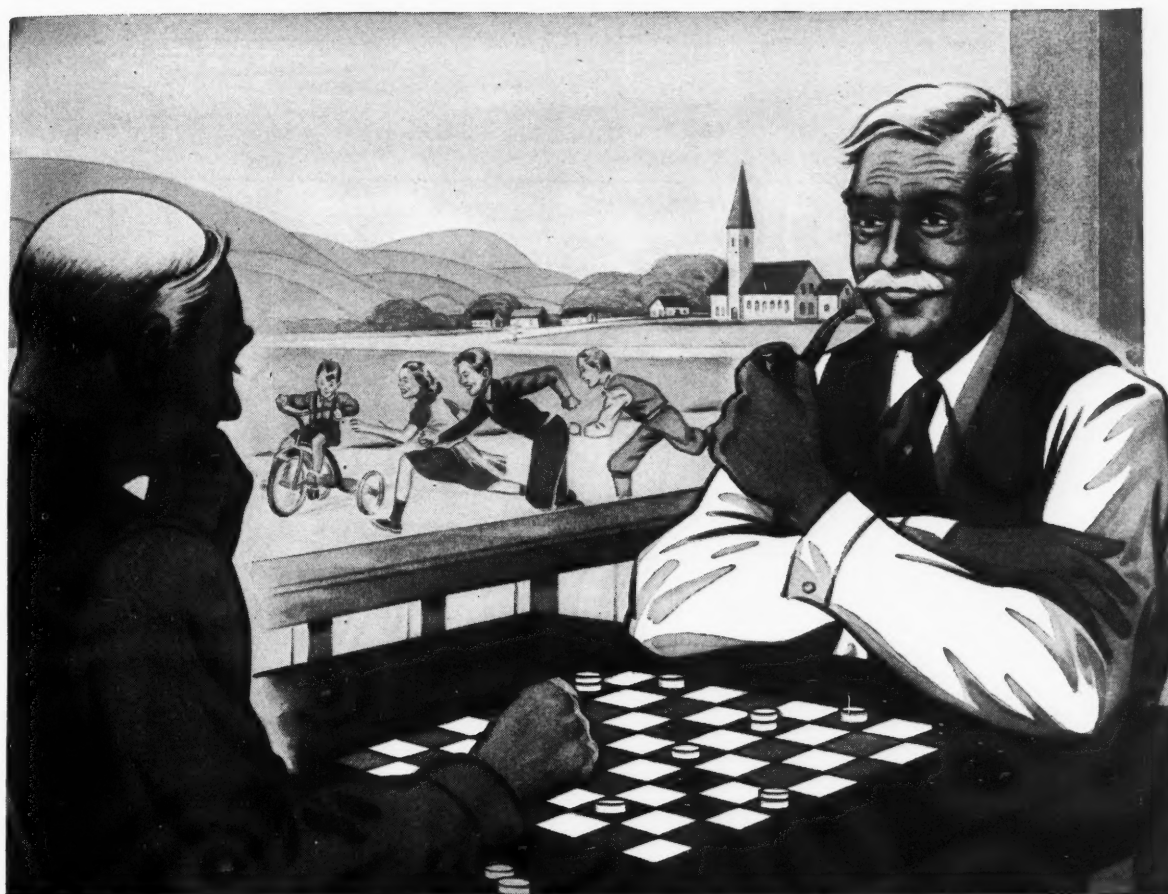


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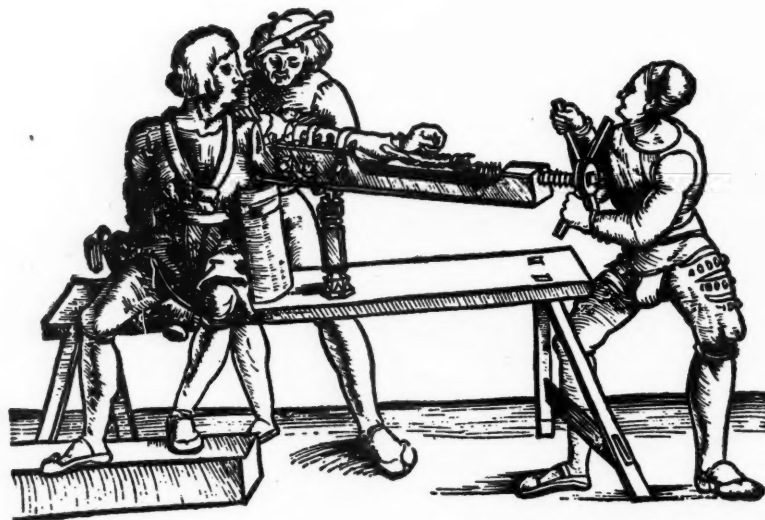
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Harvey Agnew, M.D., Editor

Toronto, June, 1944

Vol. 21



CANADIAN HOSPITAL

No. 6

Graphic Story of Struggle and Achievement

Hospitals in China Surmounting Tremendous Handicaps

By ROBERT B. McCLURE, M.B., F.R.C.S. (Edin.)

OF the many paradoxes that exist in China, one of the most striking is in the Chinese attitude towards social service in general and hospitals in particular in wartime. Thus, while in western countries we find social services being curtailed because of the war, in China not only are they suffering no curtailment but they are being carried on and expanded, not at the old rate but at a greatly accelerated rate, and all due to the war. Perhaps this is because, from the very beginning of her military activity in July, 1937, the Chinese realized that they were in for a long war. They have been proved to be correct in this theory.

It is of importance to Canadians, therefore, to see the progress China has made in her hospital programme during these seven years, and it is also useful for the Canadian doctor to see something of the post-war plans of his colleague in China.

China began her war with three groups of hospitals: the mission hospital, the government hospital and the military hospital. At the outset of the war the mission hospital, the majority from British and American



missions with a few from European missions, predominated to a very large extent. The modern *government hospital* programme in China was only gotten under way properly in 1932, and so had only been operating for five years when hostilities broke out. This gave opportunity, therefore, for only a few government hospitals to be established. Most of these were federal government institutions, located in the national and provincial capitals and in a few of the large seaports. The government policy in these institutions has been to have a first-rate medical staff and first-rate equipment, even though such standards made it possible to have only a few institutions. The numbers of personnel to choose from in staffing these institutions were very small indeed, so that it was impossible to pick and choose to any extent in the selection of staff. In spite of this it was found that the stimulus of working in government



Dr. McClure operates on a wounded soldier.

institutions and being in at the start of a large government medical programme ensured that those who took part put their best into it. So, while government hospitals were few, one must admit that they were quite good. Where possible they were connected with the provincial or federal medical college and so might be classed as teaching hospitals. They all had nursing schools attached to them.

The *military hospitals* were large in number, long in personnel and low in equipment. As a whole they have remained so. To-day they are larger in number, as long as ever in personnel with little rise in standards, and their equipment has deteriorated steadily during the intervening years. The military hospital's fortune is

directly linked up with the finances available for the army medical administration, and in a nation suffering as China is from severe inflation, the army medical administration finances hold little promise for marked improvement in the near future.

Mission Hospitals

The mission hospital in Occupied China was able in most cases to carry on in some sort of fashion between the time of the outbreak of hostilities between China and Japan and the outbreak of the Pacific War after Pearl Harbour. Each of these hospitals, as the wave of modern war broke upon it, was called upon to serve needs that were entirely new in their demands. The first part of the wave of war was usually severe air-raids, and the resulting number

of air-raid victims threw a heavy strain upon staff, equipment and accommodation. Relief funds provided in most cases the necessary finances and, in many cases, all the required drugs and supplies for this work. On the whole it can be said that the mission hospitals, supported by such relief agencies as the International Red Cross Committee and the Lord Mayor's Fund in England, put up a very creditable performance and handled the situation even better than had been hoped for.

After the air-raids came the invading army. Here conditions changed somewhat. As a rule the hospital was allowed to carry on, though in many cases they had to exert some ingenuity in getting rid of their Chinese military patients before the Japanese army of occupation came into full control. Once the Japanese military occupation was fully established, the hospital settled back once more to attend to the medical needs of its community, with a hundred and one new problems created by war conditions. Staff was not so stable, supplies were much more difficult to obtain and new equipment was not installed. This marked the beginning of a deterioration in both drug stocks and basic equipment. After Pearl Harbour, though in some cases several months were required to do it, the British and American staffs of these hospitals were interned, and while Americans have in many cases been repatriated many of the British doctors in this type of work still languish in concentration camps.

The mission hospital beyond the area of occupation, instead of being spared the problems of war, merely found itself facing problems different from those in the occupied area. The paramount problem became one of obtaining adequate supplies, and there was a long period between the shutting off of supplies from ordinary commercial sources and the time when relief supplies began to come on a slightly more adequate scale. In fact, even to-day there are no civilian hospitals in China obtaining relief supplies in anything like adequate amounts.

With the tremendous influx of "down river" refugees into Free China—refugees who were accustomed to a high standard of medical service in their port cities—a tre-

Dr. McClure was brought up in Honan Province in North China and returned to that province, after completing his education in Toronto and in Edinburgh, to serve as a medical missionary under the United Church of Canada. His internship was taken at the Toronto Western Hospital after graduation in 1922.

Upon the outbreak of war in China seven years ago, Dr. McClure went into active service on the battle-front, serving both before and behind the Japanese lines and working with the Red Cross and also with guerilla groups. In 1941 he was made commandant of the China Convoy of the Friends' Ambulance Unit and he is now head of the medical services in China of that organization.

A veritable dynamo of energy, Dr. McClure is widely known throughout the East, has had a price put on his head for some time by Japs and is well known all over Canada and the United States through his lectures and radio addresses. "Bob" has had many thrilling experiences and is probably the best-rolled man alive, having had every rib broken and both clavicles dislocated when caught on one occasion between two of his trucks.



mendous new load was put on the hospitals of Free China. Their efforts to respond to this new demand have been most creditable indeed and form a most thrilling chapter in the record of our profession in times of war. As commodities became scarce it became constantly more difficult to obtain even things that were produced locally. Thus it was almost impossible to obtain new sheets and hospital linen on the one hand and, on the other, it became increasingly difficult to obtain soap in adequate quantities for laundering what linen was left. As inflation gradually became part of the picture, to the problem of supplies was added the problem of personnel, for inflation always pinches the white collar class first. As hospital personnel is more than half drawn from the white collar group, the problems become multiplied. The other half of hospital personnel may be classified as more or less unskilled labour, and it is this class that leads in the rising costs of an inflationary period. To-day and for the past year and a half there have been no fixed salaries amongst the unskilled staff of a hospital. At the end of each month some factor, based on the cost of living index, is used and a new and ever-rising salary is worked out each pay-day.

The greatest problem remains, however, one of supplies and equipment. To-day supplies have to come almost entirely from philanthropic agencies and, while American and British sources have been the large agents in this field, Canada has played no small part. To-day Canada is planning a much greater part to be played in supplying these hospitals.

All this has thrown a heavy strain on hospital management and administration. It is a tragedy, as one visits such a hospital doing an extremely

fine piece of work, to see a fully-qualified man in tropical medicine or a man with excellent surgical qualifications spending 80 per cent of his

ABOVE: The Burma Road.

RIGHT: Bringing supplies to Paoshan Hospital.



RIGHT: Dressing a leg wound.





A ward in the hospital at Paoshan.

time and energy in solving problems of wages and in negotiating black-market purchases of needed drugs. The gravity of this problem is steadily increasing and no end is yet in sight.

Deterioration

By far the most serious thing, however, is deterioration. This is particularly noticeable in two fields. Equipment is wearing out and is not being replaced. Much of it can and must be replaced in the near future. Canadians can be proud of the part their Red Cross is playing, and this help will, as usual, be available not merely to Canadian hospitals but to every hospital doing a useful job in the war. Some of the heavier equipment cannot be replaced at present, because of lack of transportation. For instance, the large autoclave that is burnt out cannot be replaced today and is probably not available even were transportation possible. Its place must be taken by two or three portable sterilizers which, though more inconvenient, nevertheless can continue to permit a high standard of medical practice.

Deterioration in equipment is still more serious in the laboratory. As each piece of laboratory equipment is broken, that test has to be abandoned. This retrogression comes so slowly that it is very insidious, yet it is a most disturbing feature of hospital conditions in China to-day. The doctor unfortunately finds that because he has to get along without so many things his standards are all too often

lowered to the point where he no longer feels the necessity of these things.

The other deterioration is in the staff. Students are now graduating in medicine who have never seen an electrocardiogram, who have never seen large series of chest x-rays and who know little about the more elaborate diagnostic facilities. It is not merely that these students did not get a chance to do these procedures, but that scarcity of equipment has prevented them from even *seeing* them done. There is a danger that in future years these doctors and nurses may not feel that these procedures are essential. Similarly in the shortage of books: a whole generation of medical and nursing people is being raised which has never had a chance to look up references in any adequate library. Doctors finish their internship without ever having read a medical journal. This deterioration is one that will take much longer to stop and more effort to overcome.

The Government Hospital

The construction of new roads in China presented a challenge to the Federal Government authorities which they were quick to take up. The challenge was not merely to provide hospital facilities for those who might be sick or injured on the new roads; the new roads themselves were recognized as dangerous channels for the spread of infectious diseases, so the Highway Health Stations not only provided clinical facilities

but were also vigorous centres for public health. There were some 20 or 30 very creditable new hospitals established in the Highway Health administration line. Coming at a time when equipment was deteriorating in every institution, these new organizations offered a fine outlet for the energetic new medical man in China.

They are relatively well equipped in basic equipment but are extremely low on laboratory and other diagnostic equipment. Not only is laboratory equipment lacking, but the trained personnel to properly utilize such equipment does not exist in China. These hospitals along the Burma Road in many cases had to be given up during the retreat from Burma, but while they lasted they supplied a most valuable contribution in the medical field. Those that were evacuated or given up have since been re-opened along the new roads in China's great north-west. These Highway Health Stations are important roots from which will grow regional public health and clinical facilities.

Each station has a staff of two to five doctors who are graduates of good medical colleges. Each station has from three to five nurses. At least one of these is a qualified midwife and at least one is a qualified public health nurse. It can be said that these Highway Health Stations are probably the greatest single factor to-day in introducing modern obstetrics in many regions of China.

(Continued on page 66)

*Hospitals should support —
not disregard — dietetic advances*

Hospitals Have Definite Dietetic Responsibilities

PROBABLY as long as hospitals have existed, people have complained about the food served in them. Hospitals are, however, not unique in this regard; boarding schools and all places where a uniform type of food is prepared for large groups are criticized in the same way. It seems inevitable that wherever the tastes of a large group must be considered, only a small minority of the group will be completely satisfied, and the remainder will find much to dislike. This need not be too disquieting to us; if the hospital serves to introduce the patient, however reluctant, to new and better eating habits, it will have done good work. If, however, it can be shown that the hospital is failing to improve the patient's food habits, and perhaps even fostering dislike of certain nutritious foods, formerly eaten with appetite, the criticism is much more serious.

Recent advances in the study of disease have placed increasing emphasis on the importance of good nutrition in the management of all illnesses, whether of nutritional origin or not. The food a patient receives in hospital has a hitherto unrecognized importance in influencing his recovery. In the case of formerly well-nourished individuals suffering from brief illnesses the food consumed during the illness probably plays a minor role. On the other hand, studies of average families in the United States and Canada have shown that the vast majority of people ordinarily consume a diet which is far from perfect, and in many cases seriously low in certain vitamins, notably vitamin C and the B group.

The important role of vitamin C

By **DR. H. JEAN LEESON,**
School of Hygiene, University of Toronto

in wound-healing has recently been demonstrated by Crandon and Lund of Harvard. They studied an individual living for some months on a vitamin C-free diet, from time to time taking biopsies of muscle tissue for microscopic study. Six months after the beginning of this diet, a biopsy was taken and the wound that was made failed to heal properly. Later study showed that although the skin surface had united, no healing at all had occurred in the deeper tissues. At the time of the operation, the subject had shown little clinical evidence of scurvy. As soon as vitamin C was added to the diet, the wound healed promptly. Obviously many people who enter hospital for operation must be in almost the same dangerous state as this subject; whether their wounds heal well or not will depend partly on the amount

of vitamin C in the hospital diet. An added factor is the well-established fact that in infective conditions the body utilizes both vitamin C and the B group of vitamins much more rapidly than it does in health. Thus there is an increased need for these vitamins during any febrile illness. Since the body is unable to store any large amount of vitamin B or C, these factors must be replenished constantly from the food eaten.

The need for a good diet is obvious in the case of a prolonged illness, such as tuberculosis, where hospital care is continued for months or years. Patients of this class may develop serious nutritional deficiencies if the hospital diet lacks adequate amounts of the essential nutrients.

Attractive Appearance

Most hospital diets, if eaten, will theoretically fulfil the usual standards of adequacy. However, the food served is of value to the patient



only if it is eaten. If meats, vegetables and fruits are presented in an unappetizing form, even a healthy person will take smaller servings of these foods than is his usual custom. A bed patient with a poor appetite, made worse by lack of exercise, is much more apt to reject any food which is not well-cooked and attractively presented. The foods most likely to suffer in large-scale cooking are meats and vegetables, both of which are important protective foods. Meat protein is considered superior in nutrient value to protein from other sources; in many diseases there is an increased breakdown of tissue protein, hence the provision of adequate protein in the diet is essential. Vegetables are important sources of vitamins A and C; the importance of the latter in the diet has already been stressed.

Methods of Cooking

Large-scale cooking is susceptible to criticism on two counts: first, as mentioned above, because it often renders important foods unappetizing; second, because it frequently destroys much of the nutrient value of the food. Fortunately vitamin A is difficult to destroy by cooking and the amount lost in ordinary cooking is negligible. The B vitamins in vegetables are not destroyed by heat to any great extent, but are apt to be extracted from the vegetables into the cooking water and discarded. Vitamin C is the vitamin most liable to be lost in cooking. Recent studies have shown that cabbage cooked in water loses a great deal of its vitamin C to the cooking water; the more water used, the more vitamin C is lost from the vegetables. Vitamin C does not seem to be actually destroyed to a large extent by heating, but is destroyed very rapidly by oxidation when the vegetables stand exposed to the air after cooking. (See table.)

These studies show that to preserve the vitamin C content of vegetables, they should be cooked a short time in a minimum amount of water, should be kept covered, and should be served as soon as possible after cooking. Vegetables prepared in advance and left standing in cold water lose considerable vitamin C, so that preparation of vegetables should be delayed until just before they are cooked.

Ascorbic Acid Content of Cabbage Cooked by Various Methods

<i>Sample</i>	<i>State</i>	<i>Amount of Ascorbic Acid (mg./100 gm.)</i>	<i>Percentage Loss</i>
Fresh cabbage	Raw	56	
“ “	Boiled 7 minutes with double its weight of water	25	55
“ “	Boiled 7 minutes with an equal weight of water	48	21
“ “	Washed and drained and cooked 7 minutes with butter and no water added	50	10
Cooked cabbage	After standing 40 minutes in covered saucepan after drain- ing	37	34

Unfortunately, many of these rules cannot be applied in practice to group cooking. Frequently advance preparation is necessary, and the delay between cooking and eating is often unavoidable. However, if the cooking time and the amount of cooking water are cut down to a minimum, a more nutritious and much more palatable product will result. The practice of saving the cooking water from vegetables for use in soups is now widely employed, and should be encouraged.

Supplementary Nourishment

Even with improved cooking methods, vegetables served in hospitals are apt to be far inferior in vitamin C content to vegetables which are well cooked in homes. It follows, then, that a hospital diet should not rely largely on vegetables to supply vitamin C, and that substantial amounts of citrus fruits and tomato juice should be made available to all patients. Too frequently these items are furnished in liquid diets, but omitted as soon as the patient is able to eat solid foods. Fruit juice concentrates, which are frequently used in hospitals instead of the fresh fruit, should be treated with caution. These concentrates often have considerably less vitamin C than the original fruit, and when they are diluted with four or five times the volume of water in order to make a palatable drink, they may become almost worthless from

the viewpoint of nutrition. In any hospital where such concentrates are used they should be assayed for their ascorbic acid content; such an assay could easily be done in the average hospital laboratory with sufficient accuracy for practical purposes.

Tomato juice is a commonly used source of vitamin C because of its ease of preparation and widespread popularity. It should be remembered that tomato juice supplies less than half as much vitamin C as orange juice, so at least twice the volume of tomato juice is needed to provide the patients' requirement of the vitamin. The Foods Administration has now made canned grapefruit juice available to all hospitals on a priority basis. Since it is as easy to prepare as tomato juice and contains as much vitamin C as orange juice, it should form a useful addition to the hospital dietary. For patients whose fluid intake is small, either as part of their treatment or because of poor appetite, grapefruit and orange juice should be used instead of tomato juice because of their superior vitamin C content and higher caloric value.

Special Diets

Certain therapeutic diets, notably the Sippy diet, are not nutritionally adequate. The Sippy diet is almost completely lacking in vitamin C and

(Concluded on page 50)

The Value of

Clinical Records

in Medical Research

ONE of the most satisfactory things to have discovered while researching in the field of human biology is the wealth of valuable data which is contained in the medical records of our hospitals. Coupled with this wealth of information is an excellent co-operation between the custodians of these records and the investigator. A research worker is greatly handicapped unless he has the assistance of highly trained librarians, who can quickly assemble for him all the records which may be pertinent to his study. Fortunately for the investigator the modern hospital has developed three main functions. Chronologically there is first the function of caring

NORMA FORD, Ph.D.,
Associate Professor of Human Biology,
University of Toronto.

for the sick, secondly the function of teaching and—more recently—has been added the service to research. In the latter service the medical records constitute a most important department.

Studies in human biology are concerned in large part with problems of *inheritance*, and these require the searching out of records of parents, brothers and sisters and all the various kindred. Rather than to discuss such problems in very general terms, it may be clearer to describe two concrete cases and through them to point out the tremendous value which we

have found in records compiled in hospitals over the last twenty-five years.

A Clinical Illustration

One problem under investigation concerned a rare condition known as Phenylketonuria or Phenylpyruvic Amentia, first described by Fölling in Norway, 1934. It is a metabolic disorder present in certain imbeciles and consists, primarily, in the excretion in the urine of phenylpyruvic acid. (The medical students tell a yarn which is supposed to have taken place at a medical gathering in Ontario where the condition of *Phenylketonuria* was mentioned. The visiting speaker called upon one of the physicians and asked him whether he had ever seen a phenylpyruvic idiot. The physician's thoughts had been wandering far from the discussion and his reply was: "No, I haven't. You see we get very few people up here from Peru.")

The metabolic abnormality of *Phenylketonuria* is inherited as a Mendelian recessive. (Fig. 1.) In this type of inheritance each of the parents of the phenylpyruvic patient is a carrier of the defect. Each parent produces two types of germ cells. In the mother half the ova bear a defective gene (D), half carry its normal counterpart (N). Similarly in the father half of the sperm cells have the potential defect, the other half are normal. At conception there is a fifty-fifty chance as to which kind of germ cell the child will receive from each parent. He may, by lucky chance, receive from each parent a germ cell carrying the normal gene, and so both he and his descendants are freed from the defect. He may, on the other

PARENTS
APPEAR NORMAL
BUT ARE CARRIERS

GERM CELLS
2 KINDS OF OVA
2 KINDS OF SPERMS

CHILDREN
OF 3 TYPES FORMED
BY RECOMBINATIONS

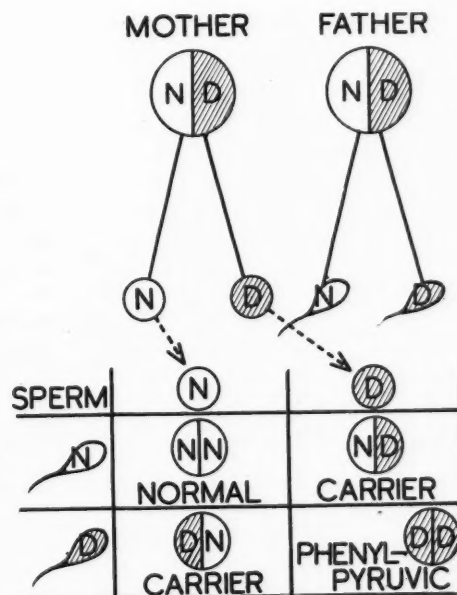


Fig. 1. Chart showing the recessive inheritance of Phenylketonuria.

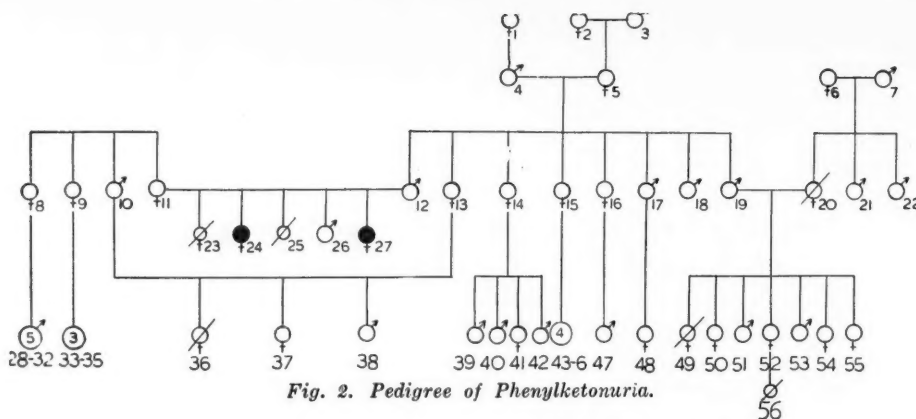


Fig. 2. Pedigree of Phenylketonuria.

Males are recorded by the symbol ♂; females by the symbol ♀.

Insane: No. 5.
Epileptiform seizures: Nos. 8, 27, 41, 49.
Skin diseases: Nos. 1, 13, 27, 39, 41, 49.

Withered arm: No. 1.
Atrophied leg: No. 4.
Deformed hip: No. 14.
Club-foot: Nos. 27, 39.
Papilloma of Larynx: No. 49.
Spina bifida: No. 23.

hand, receive one normal and one defective gene: he will then appear normal, but be a carrier. Unluckily a defective ovum may unite with a defective sperm and then results the phenylpyruvic imbecile.

The abnormality is present from birth and among its frequent physical peculiarities is hair of very light bleached colour (like a peroxide blonde), dermatological peculiarities and certain structural ones. The test for the presence of phenylpyruvic acid in the urine is simple: on the addition of 5 per cent ferric chloride and a drop or so of 2 per cent sulphuric acid, a deep green colour appears.

A point of special interest is the fact that relatives of phenylpyruvic patients, who appear normal but are

carriers, may show certain peculiarities such as abnormal skin conditions or—more seriously—in middle life they may become insane. The association of mental illness with *Phenylketonuria* has been shown by Dr. L. S. Penrose. In one extensive family pedigree which Dr. Penrose collected (1935) there were in the third generation two phenylpyruvic sisters, whose mother was a carrier and insane, and in addition two other sisters were insane (and presumably carriers). In the fourth generation there were again two phenylpyruvic sisters, the offspring of a marriage of first cousins. The father of these girls was insane, as well as their maternal uncle and maternal grandfather. If this suggested connection between subnormality

and insanity can be established, it will stand as a most important discovery.

The present study of *phenylketonuria* is concerned with a large family connection of two affected sisters, patients at the Ontario Hospital in Orillia (Fig. 2). Records of this family were found in a number of institutions, namely two Ontario Hospitals, Toronto Psychiatric Hospital, Toronto Hospital for Sick Children, Toronto General Hospital, Toronto East General Hospital, Women's College Hospital and a number of social agencies.

The parents of the two affected girls must each be a carrier for *phenylketonuria*. The father received the defect from one of his parents, and the fact that the paternal grandmother was for a time mentally ill in an Ontario Hospital leads us to suspect her as the carrier.

As was previously pointed out, both phenylpyruvic patients and their relatives who are carriers tend to have abnormal skin conditions. In the family under discussion abnormal skin conditions were recorded for the younger patient (No. 27), her paternal aunt (No. 13), and three first cousins (Nos. 39, 41, 49). Records of the skin conditions of one of the cousins were made in 1923 at the Hospital for Sick Children. Although at that time the skin condition was not understood, an excellent description was given and illustrated by sketches and now,

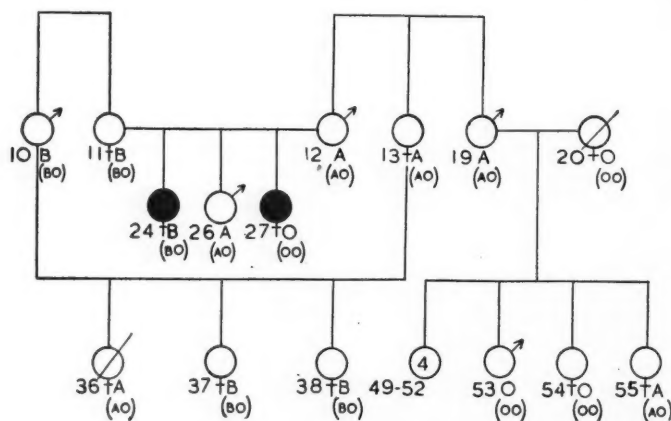


Fig. 3. Pedigree of Phenylketonuria, showing the suggested linkage of this defect with the inheritance of blood groups.

twenty-one years later, this record has an unique value.

Since the father of the two phenylpyruvic patients is a carrier, it follows that some of the paternal aunts and uncles may be carriers. The chance that any one of these brothers or sisters may have the hidden defect is one chance in two. That is, the chance is like the flip of a coin, heads or tails, whether or not he or she received the defect from the paternal grandmother.

Diagnosis by Blood Grouping

In the study of this family group we were especially concerned about the children of the youngest uncle (No. 19), who we had reason to suspect was a carrier, because of his increasing nervous instability. Three of his children (Nos. 53, 54, 55) had recently been made wards of the state, and it was desirable to know whether they might or might not be carrying the hidden defect. This determination was tentatively made on the basis of blood groups, since in the inheritance of *Phenylketonuria* there is some evidence to suggest that the gene for the defect is linked with the gene for blood groups (Munro et al. '39). It is well known that genes are inherited in linkage groups on chromosomes and that each gene has its appointed place in this group. If it is true that the gene for the blood group and the gene for the defect of *phenylketonuria* are linked together, then one can use the blood group as a *tracer* to indicate whether or not the defect is being carried. It must be remembered, however, that this paper is not a presentation of established facts, but a demonstration of the great importance which medical records play in such an investigation and of the still greater value which they will have when linkage groups have been definitely established.

Blood groups are known to be inherited according to simple mendelian laws. The four blood groups, classified by Jansky as I, II, III and IV, are known also as groups 0, A, B, and AB. In the inheritance of these groups a gene is received from each parent and the pair or pairs of genes for each group are as follows:

Blood group 0 has genotype 00.

Blood group A has genotype AA or A0.

Blood group B has genotype BB or B0.

Blood group AB has genotype AB.

To illustrate how a tracer is followed we shall refer to figure 3, showing the families of the two brothers.

In the family of the elder brother the genotypes of the blood groups were determined as follows: mother (B0), father (A0), elder defective daughter (B0), son, (A0), younger defective daughter (00). See figure 3. If the two defective daughters had belonged to the same group (either B0 or 00), a simple case of linkage of the defect in the mother with gene B or gene 0 would have been indicated. However, crossing-over of the chromosomes occurs and we may assume that this has here taken place, with the result that the elder daughter inherited from her mother the defect for *phenylketonuria* linked with the gene B, while the younger received the defect from her mother linked with the gene 0. From the father both daughters received the defect linked with the gene 0.

In the family of the father's youngest brother (No. 19), the wife was deceased, but the hospital record gave her blood group as 0. The three children, now wards of the state, were found to belong to groups 0, 0 and A. The father refused to be blood grouped, but it was easily deduced from the data of the mother and children that the father belonged to group A, with genotype A0. With-

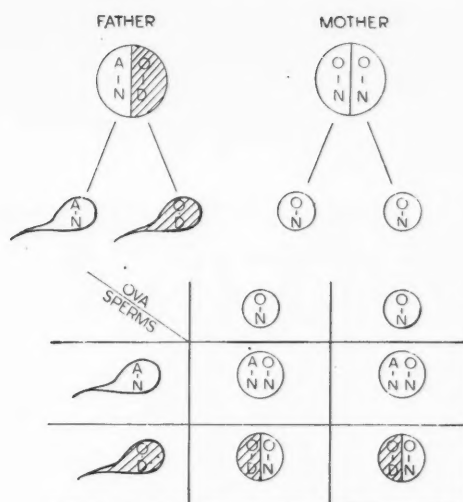


Fig. 4. Chart showing the suggested linkage of Phenylketonuria with blood groups.

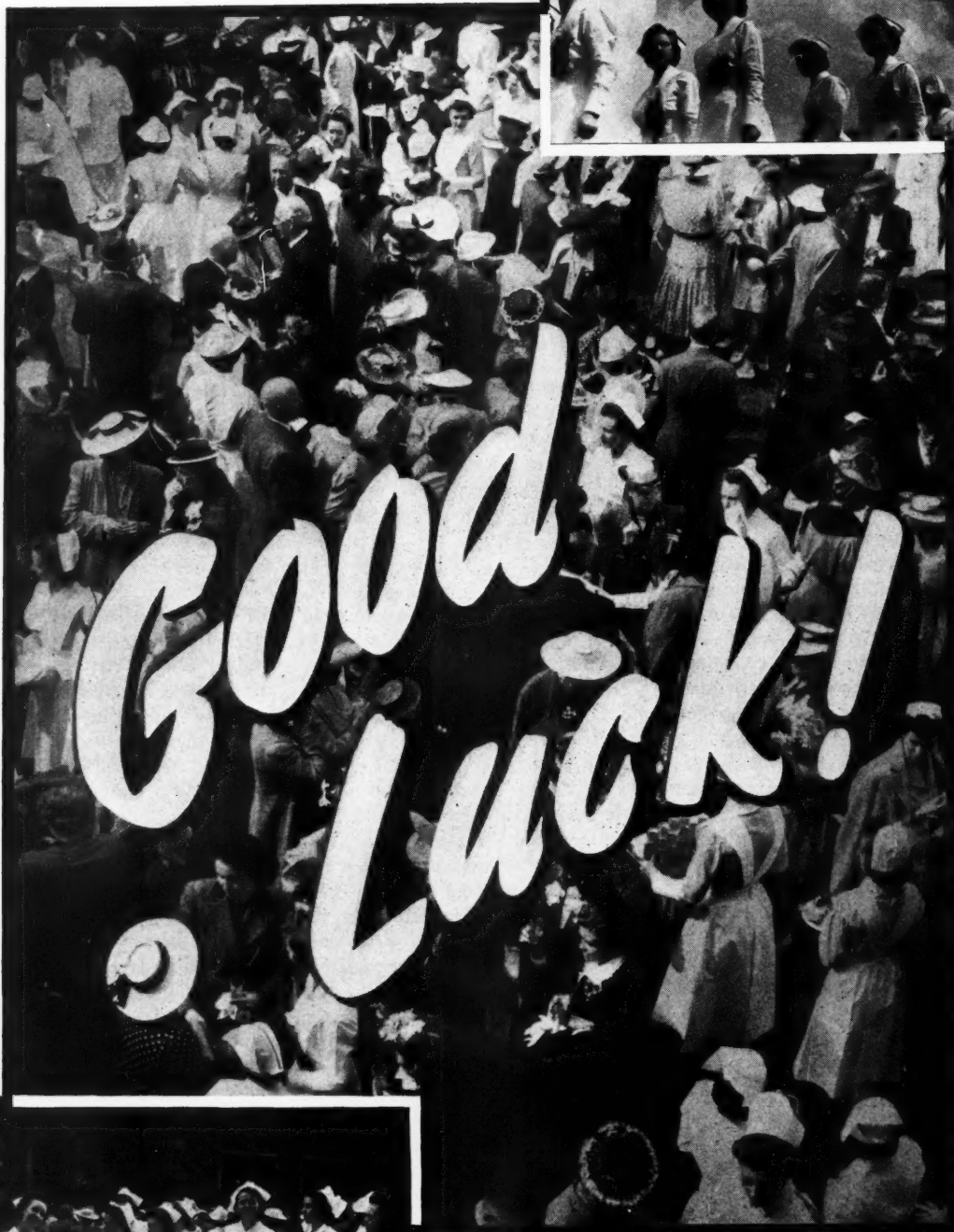
out the hospital record of the mother's blood group we would have been blocked in our study, but with this information we could derive all the data needed.

Knowing then that the two brothers belonged to blood group A0, the chance that the youngest brother has the same gene 0 (linked with the defect) as his elder brother is a fifty-fifty chance. If the youngest brother is a carrier then he and his wife would produce germ cells of the type shown in Figure 4. The wife would give to each child a gene 0 linked with the normal counterpart of the defect; the husband could give gene A linked with a normal gene on gene 0 linked with the defect (provided no crossing-over has occurred). Therefore of their children, those belonging to blood group 00 would be carriers; those of group A0 would be free from the defect.

Human genetics is striving to record the "geography" of chromosomes and to know the appointed place of each gene relative to other genes. The speed of attaining this goal depends in part on the accuracy and completeness of medical records.

Pyloric Stenosis

The second problem which may be cited concerns the inheritance of pyloric stenosis. The data in this instance was assembled from 436 case-histories on file at the Toronto Hospital for Sick Children. The records of twins here proved to be significant. Through the study of twelve (Concluded on page 52)



Maintaining Standards of Nursing Service

under Wartime Conditions

By MARY E. MACFARLAND, Reg. N.,
Superintendent of Nurses, Toronto General Hospital

MAINTAINING good nursing service in civilian hospitals under wartime conditions presents a problem which requires thoughtful approach and careful study. With the progress of the war, we are faced with an increasing shortage of nurses. How can the demands for nursing service be met without reducing standards? What is the picture of nursing in hospitals to-day? Is the nurse being used for nursing, or is she carrying a great load of duties which cannot be classed as nursing?

We may be certain that the shortage will not be lessened for some time to come. Therefore, we must decide what adjustments can be made. Nursing service must be conserved and supplemented — even rationed if necessary. An honest effort must be made to maintain an acceptable quality of nursing service during the present situation. Difficulties must be discussed frankly. In planning a programme whereby standards may be upheld, there are certain factors to be considered.

Hospital Relationships

The hospital exists for the patient—who is of paramount importance. The work of hospital administrators, medical and nursing staffs is closely inter-related. The most effective accomplishments result where relationships are sympathetic and co-operative between these groups whose aim and end it is to place the patient

Address, A.C.S. War Conference at Toronto in March.

first. There is no limit to what can be achieved when a fine *esprit de corps* exists among the personnel. It is a splendid thing to possess the ability to see one's work in relation to others. Sympathetic consideration of common problems leads to understanding. The need for mutual understanding is of vital importance. This, with the manifestation of appreciation tends to bolster morale. Morale is that condition which gives one confidence, courage and pride in one's work.

Maintaining Staff

Because of the urgency of the needs of the hospital and the increasing demands of the present day, professional qualifications should be upheld for those who carry responsibilities in situations much more complicated than those confronting nurses before the war. Members of staff should not forget standards. Educational services should be strengthened, not weakened. The quality of nursing depends upon having sufficient, well-trained and experienced instructors, supervisors and staff. These are needed to guide graduates, students and constantly-

This is the time to study and appraise the value of services which have grown up over a period of years and are now accepted unthinkingly.

changing auxiliary help, and to organize them into as efficient a working group as possible. Bursaries have been made available to enable nurses to take post-graduate courses offered by universities. Thus the usefulness of these nurses is increased, and they are prepared for advanced positions.

Salaries commensurate with the professional preparation and experience should be offered to encourage graduates to remain in hospital positions. Nurses who stay at their posts are contributing to the war effort—working extremely hard and well, and without adventure or glamour. It is fundamental, therefore, that working conditions and hours of duty be reasonable. In a hospital with or without a nursing school, the effective operation of the educational programme, the welfare of patients and staff and the health and spirit of the nurses, all depend on these considerations.

Distribution of Nurses

Mention has already been made that nursing service should be rationed. Luxury service should be restricted and not permitted to consume so many nurses. More nurses would then be available for general duty in hospitals where every bed is filled and nurses are needed for bedside nursing. Seriously-ill patients must be completely nursed and given all the care possible to restore them to health. On the other hand, many convalescent patients would gladly follow suggestions and willingly lessen demands on nurses' time.

The attitude towards what a patient may be encouraged to do for himself is changing. Now is the time to study and appraise the value of services which have grown up over a period of years and are now accepted unthinkingly.

Civilian hospitals have expanded and are still expanding their services. Hospital facilities are being used to the greatest capacity, and staffs have been depleted of their experienced nurses. It is now more than ever important to place a nurse where she will serve best—giving and receiving satisfaction in her work. Rotation and promotion of nurses within the institution is a valuable way of recognizing ability and re-

(Concluded on page 64)

Medical Exhibit by Armed Forces Features C.M.A. Convention

Life Saving Devices Attract Crowds

FROM the point of view of the layman, undoubtedly the most striking feature of the recent convention of the Canadian Medical Association in Toronto was the amazing scientific exhibit shown by the three Armed Services and the Department of Pensions and National Health. Nothing could better demonstrate how whole-heartedly Canada's medical and scientific skill has been devoted to the problems created by the war than this collection of preventive and remedial equipment. The exhibit ranged from such practical items as mosquito netting for airmen forced down in the bush to penicillin, the research laboratory triumph—from sample meals to a modern fever cabinet—from fishing lines for sailors stranded in life-

boats to a model of a milk-reconstitution plant. It was probably a surprise to some of the visitors to learn how brilliant has been Canada's record in the field of medical research since the war began. Many a process or piece of equipment first evolved here has been adopted by the other United Nations, either *in toto* or modified to suit local conditions.

The exhibit was crowded all day, and expert demonstrators were kept busy switching from medical to lay terms to suit their questioners.

A very complete display of life-saving equipment by the Senior Service attracted throngs of visitors. Here interest centred round the R.C.N. life-boat, the "Carley Float", and a dummy wearing the new life jacket which has already been credited with saving so many lives. The jacket is warm, waterproof and buoyant and is capable of supporting two other men besides the wearer. Chest and abdomen are specially protected against damage from underwater blast due to depth charges. Socks treated with vaseline and high boots guard against "immersion foot". A high, rigid collar piece keeps the head out of water, even if very tired or unconscious. A winking signal light attached to the cap is operated by means of a battery in the jacket pocket. During the daytime rescuers are drawn by the cap itself, which is bright orange—the universal distress colour.

The Carley Float is designed to support 10 men, but up to 24 men have used it successfully at one time.

The R.C.N. Life Jacket.

As well as identification and distress equipment it carries two food containers and one of emergency medical supplies. The food is highly concentrated, and designed to produce the maximum of heat and energy, while the water (labeled "Use Sparingly") has been specially treated to prevent corrosion from the tins. The medical supplies (which are pretty well standard for all three services) include scissors, gauze and adhesive tape, some kind of antiseptic, burn dressing, sedatives, etc. Full instructions are printed on the packages. (A unique Navy feature was a 12-oz. container labeled "Concentrated Restorative". This euphemistic title is not likely to fool the average sailor. He knows rum when he tastes it.)

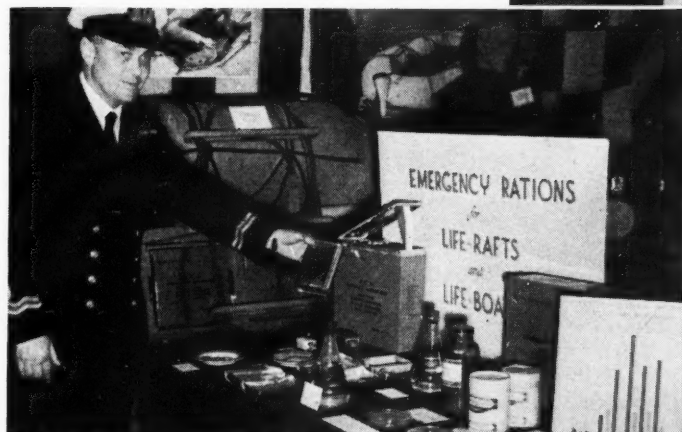
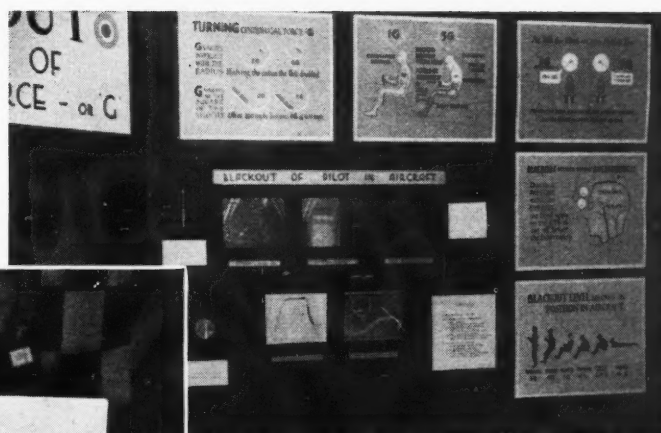
All the Services stressed the importance of nutrition, but the Navy, instead of pictures or charts, set up three sample meals, and backed them with an impressive array of food-stuffs and samples of cartoons used to teach the value of a balanced diet.

The Air Force flying and ground crew clothing, with their many protective devices, drew an interested crowd. The ungainly looking, bright orange "Exposure Suit" for airmen forced down at sea was perhaps the star attraction. This is an all-enveloping affair with body, feet and gloves all in one piece. It can be slipped on in a few seconds, and is tied by a drawstring at the neck. This traps sufficient air inside the waterproof material to give buoyancy and prevents a man from sinking through the sheer weight of a water-sodden flying kit. The self-inflating raft or "dinghy" was on display,



RIGHT: Part of the fine R.C.A.F. exhibit.

BELOW: The Navy's Emergency rations on display.



with its food and medical kits. As in the Navy, the emergency kits stressed means of attracting the attention of search craft, and flags, signal pistols, mirrors and fluorescine dyes are all included. (So, too, are playing cards and chewing gum, for what are termed their "psychological value".)

Photographs and x-rays showed what happened to an airman when he "blacked out". Charts showed that the annual rate of hospitalization of the W.D.'s was 8,095 days care per

1,000 personnel. Of days lost, 22.9 per cent were for respiratory diseases, the highest single cause. For men, the annual rate was 6,655 days of hospital care per 1,000 strength. Here, too, the greatest cause of non-effectiveness was respiratory diseases, which accounted for 16.6 per cent of the days lost.

The Army's famous "Pulhems" method of screening recruits according to their physical, mental and emotional capabilities was illustrated by

photographs and diagrams. A display on the problem of night blindness and the use of the eyes in the dark attracted much favourable comment. Another most interesting feature was a series of large photographs showing the evacuation of casualties from the battlefield in Italy and elsewhere, and of army medical work done in everything from an ambulance to the best-equipped base hospitals in England.

The three services combined in a display of the production of penicillin, showing all the stages of culture and growth to the finished ointment, powder or liquid. There was shown the original apparatus used in the production of the drug in Toronto. This complicated scientist's nightmare has long since been superseded by more modern methods.

Civilian Use of Penicillin

It had been hoped that some statement regarding the civilian distribution of penicillin could be made in this issue, but arrangements have not been completed to the point where a statement can be made. If any statement be released before our next issue, the Department of Hospital Service of the Canadian Medical Association or the Canadian Hospital Council will get in touch with the various hospital associations.

Within recent weeks penicillin has been issued to selected hospitals in the United States, which hospitals have functioned as depots for their areas in the distribution of limited quantities of penicillin for use in

certain specified types of cases under strict observation in hospitals.

Hospital Benefits Total \$1,000,000

At the monthly meeting of the Board of Trustees of the Manitoba Hospital Service Association, it was reported that hospital service benefits provided subscribers since the inception of the plan, exceeded \$1,000,000.

During the first quarter of 1944, hospital benefits for patients amounted to \$132,167.68. These hospital claims represent 86 per cent of income from subscribers' fees. Enrolment increased by 19,813, bringing the total to over 140,000.

Royal Ottawa Sanatorium To be Enlarged

The proposed 100-bed addition to the Royal Ottawa Sanatorium may prove inadequate if present intensive case-finding in the Ottawa district continues, warned Dr. D. A. Carmichael, superintendent of the sanatorium. A surgical unit of 30 beds with operating suite and accessory rooms and equipment is urgently needed, he said.

"In politics, however, and above all in international politics, it is necessary to be pitiless to illusions, for they lead away, as is their essence and nature, from hard truths and down the path that leads to the precipice."—Vansittart—*Lessons of My Life*.

Obiter Dicta

Effective Medical Follow-Up

ONE result of our National Health Survey has been to focus interest on the extent to which our hospitals are meeting the needs of the public. A field in which much still remains to be done is that of the discharged patient. While many of our large hospitals with well-organized social service departments do excellent work in this respect, the majority of our hospitals make little if any effort in this regard. Every staff doctor knows that much of the progress made in hospital will soon be lost when the patient returns home, and he is seldom surprised when a broken shadow of the once-optimistic patient is again admitted a few weeks later—this time for an indefinite stay.

A striking illustration of the value of effective medical follow-up is the experience in Syracuse, where the medical school, in co-operation with various organizations undertook serious medical and welfare oversight of the 902 patients discharged from the medical wards of the University Hospital in a period of 19 months (see Book Review p. 58). During this period 84 per cent of patients admitted to the medical wards suffered from chronic diseases, one-third being degenerative cardiovascular diseases. An "extramural resident" followed though on all cases and assigned medical students visited the homes as well. The readjustment of the patient to home and working conditions was carefully controlled and proper follow-up care maintained. The net result was most gratifying. Patients could be discharged much sooner than hitherto and re-admissions for relapse were materially reduced. In one group of 165 patients, designated the "Home Care Group", 7,268 days of hospital care, at a cost of \$29,072, were saved through the services of the Extramural Resident. In other words—and apart from the value to the patients—the saving through this one group alone was more than three times the cost of the entire experiment.

Certain observations are noteworthy. Whereas only 59 per cent of earlier patients discharged to their private physicians reported to them and only 23 per cent of those referred to the Free Dispensary did so, through the influence of the Extramural Resident the figures rose to 79 and 84 per cent respectively. The value of re-admission to the *same* hospital with the consequent utilization

of former investigations is revealed by the fact that whereas re-admissions to the University Hospital averaged but 14.4 days, thirteen former patients admitted elsewhere had an average stay per re-admission of 25.6 days. Obviously, too, a combination of medical care and of social welfare oversight and adjustment is necessary. It was of proven value for both the home doctor and the welfare worker to be thoroughly aware of the hospital findings, and vice versa. "A visit to the home brings out a wealth of detail not revealed in an interview with the patient and his relatives in the hospital." In the field of psychosomatic medicine this fuller knowledge proved particularly valuable.

"The information revealed by this experiment tends to re-emphasize the fact that the hospital is the pivot around which should revolve the various services, in-patient care, outpatient clinics, and public welfare programmes, which maintain the health of the people. The provision of home care for discharged medically needy patients is one further step toward a more economical and beneficial use of the hospital in the care of the indigent. Unless we are prepared to furnish a qualified physician to pilot the medically needy patient suffering from chronic disease on his course after leaving the hospital, we shall continue to waste time, effort and many thousands of dollars by hauling him back to port for repairs each time he goes on the rocks."



Gallup Poll and Health Insurance

THE results of the questionnaires on health insurance by the Canadian Institute of Public Opinion (Gallup Poll) provide an interesting indication of the evolution of public thought with respect to this subject. Press comments on the reliability of these polls vary, depending in the main upon whether the newspaper making the comment is a supporter or not of this organization. The simple fact, however, according to the director of the Canadian Institute, is that in 204 forecasts of elections, local, provincial, state or national in the various countries where they operate, they have been correct 204 times! Not a bad batting average at that!

In their estimate of percentage standings of individual contestants they have been out an average of but four per cent over the years, and in the last few years have been out an average of only two per cent. The Gallup Poll won its spurs at the time of the Landon-Roosevelt election, when the poll of Dr. Gallup not only routed the poll of the Literary Digest but practically forced its discontinuance. Dr. Gallup's success was based on careful wording to avoid ambiguity; personal interviews rather than mail ballot, thus ensuring correct understanding of the question; and contact with *all* classes of people—a contact which he shrewdly realized was not possible with the former method of using selections from telephone books or lists of automobile owners.

In April for the past three years the people of Canada have been asked:

"If the Government should start a national health plan, would you be willing to pay a small part of your (or your family's) income every month so that you and your family would receive medical and hospital care whenever you needed it?"

These April polls, a year apart, indicate:

	1942	1943	1944
Willing	75%	69%	80%
Unwilling	18%	16%	16%
Undecided	7%	15%	4%

The 1944 replies varied considerably in different areas. For instance:

	Quebec	Ont.	Prairies
Willing	67%	83%	90%
Unwilling	28%	13%	8%
Undecided	5%	4%	2%

Breaking down the 80 per cent in favour of the principle, 44 per cent (of the total vote) thought the rates about right (\$12 plus a grade income tax within limits), 29 per cent thought them too much, one per cent thought the rates actuarially unsound and six per cent were uncertain about the rates.

The drop in percentage of those in favour in 1943 may have been due to the announcement of the \$26 premium. Many had been supporting the idea of health insurance without realizing that these services would have to be paid for. Further evolution in public thought and the lowering of the personal premium to \$12 may have accounted for the rise in 1944 to 80 per cent in favour, despite the inclusion of the percentage income tax.



New Zealand Plan Questioned

MUCH has been written of the New Zealand plan of social security, and it has frequently been quoted as an ideal plan. It may take some time to appraise its true value, for present wartime conditions are not conducive to smooth operation and the smoke of controversy still affects the vision of the participants. Conflicting reports come to hand of the experience there. The shortage of doctors is very acute, aggravated of course by the war; one urban area of 40,000 people is

said to be without a doctor and many rural areas have had their only doctor drafted. There are complaints that many doctors, particularly in cities (and not necessarily the best men) are making inflated incomes on inferior work. Many doctors are seeing far too many patients a day to do scientific work; again, both the plan and the war may be contributory factors. A former member of the national medical council is reported to have stated that "some medical men who cannot be called eminent received \$50,000 each from the social security fund last year". A past-president of the medical association described the plan as "an awful racket". Three physicians were said to have incomes which were the equivalent of seeing 73 patients on every day of the year. Excessive certification, over-prescribing, over-attendance and reduced standards of care are being noted. As in Great Britain, difficult cases are being passed on to the hospitals. There are complaints that the government, having put in the plan as pledged to the people, has not paid enough attention to its operation—or perhaps too much attention of a political nature. One commentator in *Medical Care* felt that the greatest error was "the fortification of the individual competitive motive in practice".

The hospital situation is acute and it has been impossible to give the people the hospital services demanded. One complication has been that many sick soldiers have been placed in civilian hospitals, a practice which has not only strained the bed facilities but has added to the taxes on property owners because of the requirement that one-third of the maintenance charges be met by municipal taxation. Costs have already exceeded expectations and, because of the lack of accommodation, costs will be still higher when more beds are provided.

However, the people on the whole have been reasonable and have put up with many restrictions without undue complaint. The medical men, particularly the middle-aged and younger men, are endeavouring to work out adequate controls and revisions, and an effort is being made to revamp the hospital system to conform to modern requirements.

As for the financial aspects, Boards of Trade and other groups interested in the solvency of the country are much concerned for the future, because of the alarming increase in taxation. The Labour Government would seem to be so crushing the country with taxes and public debt, altogether apart from the war, that the future of industrial and other development has been seriously jeopardized. In a recent address Mr. V. R. Smith, general manager of the Confederation Life Assurance Company, quoted the following New Zealand figures:

	1935	1939	1942
Total taxation exclusive of war taxes	£20,177,000	£32,810,000	£46,226,000
Taxation per head of population exclusive of war taxes	£13-8-2	£21-17-6	£30-16-15
Public debt exclusive of borrowing for the War (in millions of pounds)	£280	£304	£342

These increases are very sobering and indicate the necessity of tempering utopian exuberance with cold financial logic.



St. Michael's Hospital, Toronto, Celebrates Golden Jubilee

THE Golden Jubilee Year of the School of Nursing of St. Michael's Hospital, Toronto, brought together over six hundred of the one thousand five hundred and fifty graduated within these golden years. Distance and circumstances, of course, prevented many from attending, but greetings from overseas and elsewhere united them with us in spirit, increasing our numbers to over a thousand. Worthy of mention is the fact that two pioneer graduates were present. It was a three day celebration—May 9th, 10th and 11th, the days allotted respectively to the graduates of 1894-1920, 1921-1933, and 1934-1944.

In the beautiful assembly room decorated with panels portraying the history of the community, Reverend Mother Margaret, Superior General of the Sisters of St. Joseph of Toronto, welcomed the graduates on behalf of the Sisters. Years dropped and dignity fled as those from Pasadena, New York, Chicago, Detroit and points in Canada greeted each other with ecstatic shouts of joy.

On the opening day at 3.30 p.m. Solemn Benediction of the Blessed Sacrament was given in the chapel

by His Excellency, Most Rev. J. C. McGuigan, D.D., and on the succeeding days by Rev. W. P. Smith, a former chaplain and Rev. M. F. Mogan, the present chaplain; the assisting priests were Rev. T. F. Battle, Rev. A. E. McQuillen, Rev. H. Murray, Rev. M. J. Carroll, Rev. W. Dore, C.S.B. and Rev. E. Beahen, C.S.S.R., all former chaplains. At the close of the Benediction, His Excellency read the Holy Father's message which conveyed congratulations and the papal blessing; on the following days Rt. Rev. J. E. McRae, D.P., D.C.L., and Rt. Rev. W. C. McGrath, P.A. represented His Excellency in conveying the papal message.

A pageant, including some of the "high lights" in the history of the past fifty years of the school, was presented by the 1944 preliminary students in the flag-decked auditorium of the Nurses' Residence. One of the most effective features of this very beautiful presentation was the replica of the first graduation picture. Five of the students dressed and posed as this first group of graduates, and when the hearty applause died down a student dressed as St. Michael whispered messages to two of these, who quietly

left their places, passed into the audience and presented the two graduates of 1894, Mrs. Milliker of Simcoe, Ontario, and Miss O'Leary of Toronto with beautiful corsages. Another tableau portrayed the representatives in the various Sisterhoods, and in the many fields of work in which the graduates are engaged.

At the tea, which was served by the Sisters in the reception room of the nurses' residence, the joy of the "get together" seemed to reach the climax. The chatting and visiting went on for hours, and broke up only to be renewed again at the homes of those who were happy to be living in Toronto and were in a position to entertain the out-of-town guests. Each evening of the three days the nurses joined their friends in happy class reunions. For many it was the first opportunity of being together since their own graduation day.

The growth of the hospital in fifty years and the good effected by its one thousand five hundred and fifty graduates during that period opens up a glorious vista of almost overwhelming magnitude, and prompts a fervent prayer for God's blessing on this noble work.

—S.S.J.

Rehabilitation Conference Reveals Need for Increased Post-Graduate Facilities

A CONFERENCE to consider steps necessary to provide post-graduate opportunities for demobilized medical officers at the close of the war was held in Toronto on May 26th. Called by the Canadian Medical Procurement and Assignment Board, some fifty persons representative of various organizations attended. These included the chairman of the Divisional Advisory Committee in each province, and representatives of the Canadian Medical Association, the Association of Canadian Medical Colleges, the Canadian Hospital Council, the Royal College of Physicians and Surgeons of Canada, the D.P. and N.H., and other bodies. The Canadian Hospital Council was represented by Mr. R. Fraser Armstrong of Kingston, Mr. A. J. Swanson of Toronto and Dr. Harvey Agnew. Mr. Walter Wood and Dr. Geo. M. Weir, in charge of Rehabilitation at Ottawa, were special guests.

The magnitude of the problem was revealed by a summary submitted of the information received from medical officers respecting their post-graduate plans. This tabulation, based on an analysis made by Captain Willard, was presented by Col. T. A. Lebbetter, Executive Secretary of the C.M.P.A.B.

Survey Replies

Up to May 20th, 1944, 2,260 completed questionnaires (Q. 4), of which 1,800 have been tabulated, had been received. As there will likely be 4,000 medical officers in the three services by the end of this year, the

anticipated demand will be approximately twice the figures now available, subject, of course, to an expected reduction when demobilization actually takes place, and also to the likelihood that those most interested have been the first to reply.

Two thirds (67.3%) of the 1,800 whose replies have been tabulated wished to take post-graduate work on demobilization. Another 23.5% made a dual reply, desiring to enter civilian practice but also to take post-graduate work. These two groups total 90.8% of the replies.

Some 783 (43.5%) replying had never been in civilian practice. After the next group of interns have enlisted, this figure will rise close to 50%. (By the end of the year there will be some 2,060 medical officers who have never been in civilian practice.)

Special Work Desired

Of the 1,633 M.O.'s desiring post-graduate work, only 2.8% (46) wish general post-graduate work. The great majority desire to take a particular type of training. The replies indicate:

26.8% (437) desire surgery,
18.4% (300) desire medicine,
11.5% (188) desire obstetrics and gynecology,
5.6% (92) desire E.E.N.T.,
4.7% (77) desire psychiatry and neurology,
4.5% (74) desire radiology,
3.9% (63) desire public health,
3.5% (58) desire anaesthesia,
3.1% (50) desire paediatrics,

2.6% (42) desire pathology,
2.3% (37) desire orthopedics,
1.3% (22) desire dermatology,
1.0% (16) desire urology.

Some 32.2% (526) of the 1,633 desiring post-graduate work wish to take it in Canada, 19.8% (323) specify the United States and 6.8% (111) prefer Great Britain. The remaining 41.2% (673) did not specify the country preferred. Of those indicating Canada 54.2% mentioned Ontario and 30.8% mentioned Quebec. Some 11.4% did not specify any province.

Length of P.G. Work

An analysis by age groups reveals that the recent graduates want considerably longer post-graduate training than medical officers who have been in civilian practice for some time. Totalling all age groups:

10.4% desire up to 6 months,
21.1% desire 6 to 12 months,
22.8% desire 1 to 2 years,
14.2% desire 2 to 3 years,
5.1% desire 3 to 4 years,
2.2% desire 4 years or more,
24.2%—not specified.

By age groups, however, the results are as in the accompanying table, the younger men strongly favouring one to three years of training and the older men preferring from a few months to a year of training.

These figures, representing as they do the desires of approximately half of the medical officers who will be demobilized in the post-war years, indicate the magnitude of the task to be faced. Even though many of the returning doctors change their minds and go directly into practice, our resources will be badly overtaxed. Obviously steps will need to be taken without delay to perfect the organization necessary to provide our medical officers with the extra training desired.

Initial Organization Planned

At this Conference, which was merely an exploratory one, no definite action was taken, but at a subsequent and smaller meeting in Ottawa on May 30th, further steps were taken to expedite a programme. The Canadian Hospital Council was

(Continued on page 48)

Length of P. G. Work	EXPERIENCE AND AGE									
	Intern- ships or P. G. only		Less than 5 yrs. practice		5-9 years practice		Under 40 years with 10 years practice		40 years of age or more	
	No.	%	No.	%	No.	%	No.	%	No.	%
Up to 6 mos.	11	1.4%	11	4.0%	31	13.4%	25	29.4%	91	33.3%
6-12 mos.	105	13.7%	66	23.9%	74	32.0%	24	28.2%	75	27.5%
1-2 years	214	27.9%	76	27.5%	56	24.3%	7	8.2%	20	7.3%
2-3 years	177	23.0%	45	16.3%	8	3.5%	1	1.2%	1	.4%
3-4 years	77	10.0%	6	2.2%	....	.....	....	.....	....	.....
4 yrs. or more	32	4.2%	4	1.5%	....	.....	....	.....	....	.....
Not specified	152	19.8%	68	24.6%	62	26.8%	28	33.0%	86	31.5%
Total	768	100.0%	276	100.0%	231	100.0%	85	100.0%	273	100.0%

With the Hospitals in Britain

By "LONDONER"



C. E. A. Bedwell

Dear Mr. Editor:

There has recently been a bunch of legal decisions on which it may be of interest and perhaps of use to make a few notes.

The first was an action, ostensibly by a nurse against a hospital, though in fact it was two insurance companies settling whether compensation is payable under the Workmen's Compensation Act when the employee has contracted tuberculosis. It is not necessary to go into the details, as it was quite clear that the nurse had contracted the disease during the course of her employment, and accordingly judgment was given in her favour. It is said to be the first time that proceedings have been taken to establish the point, possibly because hospitals usually settle such matters without raising legal points. It happens, however, that the question of tuberculosis as a risk of employment has come up again in the case of a policeman named Gorvin who was in the City of London Police. Under the Act providing pensions for the Force he was entitled to a pension upon being "incapacitated for the performance of his duty by infirmity of mind or body occasioned by an injury without his own default." In a later section the definition was clarified by adding that the injury must have been incurred "in consequence of some act performed in the execution of his duty". Of this there could be no direct evidence, but the Court held that the words "in execution of his duty" must be construed benevolently and so the policeman is getting his pension.

Another Workmen's Compensation case gave an opportunity for the Court of Appeal to explain what is meant by an "agreed medical report". Under orders of the Supreme Court an attempt has been made to avoid conflicting medical evidence by secur-

ing agreements among the medical men about the condition of the plaintiff. In this case, which was against the Liverpool Corporation, two reports had been put before the Court which were not only inconsistent with each other, but together did not present a complete account of the condition. Whereupon Lord Greene, the Master of the Rolls, said: "The phrase 'agreed medical reports' means and means only, a report where the facts stated are agreed as true medical facts, or other facts as the case may be, and the medical opinions expressed are accepted as correct." In the normal case in pursuance of the order directing this procedure "the doctors on the two sides would meet and embody their view in a document which they may both sign". Medical men on the staff of hospitals would be among the first to appreciate the time and trouble to be saved by establishing this as the general practice.

Medical Assessors

The relationship of the medical man to the Courts was dealt with by the House of Lords in a judgment in the case of *Richardson v. Redpath Brown & Company*. Their observations are of so much interest to all concerned with medico-legal problems that it may be useful to note that a full report is obtainable in the *Times Law Reports* of 14th January, 1944—a publication distinct from the *Times* newspaper but published in that office. The immediate point under consideration was the position of a medical assessor. Under our Workmen's Compensation Act medical referees are appointed by the Home Secretary and have certain specified duties such as certifying that the incapacity of a workman is likely to be of a permanent nature. Whatever reports he may make or certificate he may give in the event of litigation will be open to both parties.

A medical referee is quite distinct

from a medical assessor, who may be appointed as an expert to assist the Judge in understanding the effect and meaning of technical evidence. The Lord Chancellor, Lord Simon, continued: "He may in proper cases suggest to the Judge questions which the Judge himself might put to an expert witness with a view to testing the witness's view or to making plain his meaning. The Judge may consult him in case of need as to the proper technical inferences to be drawn from proved facts, or as to the extent of the difference between apparently contradictory conclusions in the expert field." In limiting the functions of the medical assessor in this way, the Lord Chancellor recognized that an established practice of the Courts would be upset, as medical assessors have examined workmen and acted as expert witnesses by giving evidence of the condition to the Judge, either publicly or privately, without any opportunity being available for cross examination by Counsel.

It has only been possible to give the main outline of the respective functions of medical referees and medical assessors, which were laid down with that masterly lucidity for which Lord Simons is famous.

The last case to be mentioned is in quite another category. A lady left all her estate upon trust "to apply the same to the medical profession for furtherance of psychological healing in accordance with the teaching of Jesus Christ". The late Mr. Justice Bennett held that this was not a valid and effectual charitable trust. The Court of Appeal, however, have reversed that decision, as the Master of the Rolls, Lord Greene, pointed out that the words used were not "for provision of psychological treatment" but "for furtherance of psychological healing". The legal niceties may be somewhat beyond the layman, but anyone concerned with the healing of the sick can appreciate the interest and importance of the gift.



A FINE BALANCE OF NECESSARY QUALITIES

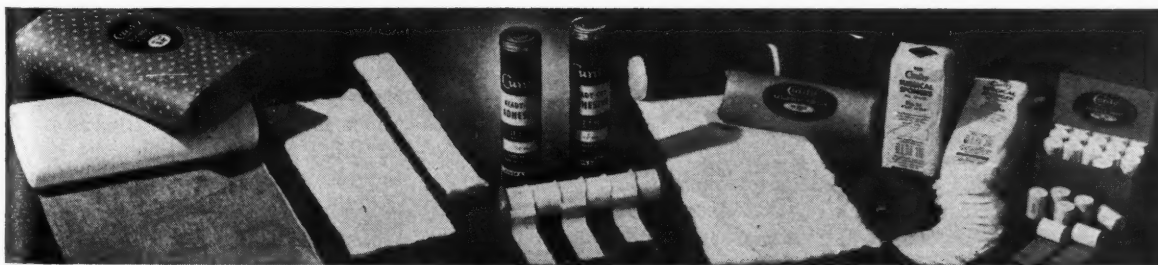
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Here and There

Thomas Wakley

Editor and Reformer
(1795-1862)

WE are indebted to Dr. E. P. Scarlett, writing in the *Historical Bulletin* of the Calgary Associate Clinic, for a very illuminating story of the life and achievements of Thomas Wakley, the tempestuous medical reformer who was responsible for so many basic improvements in medical organization and who founded *The Lancet*, famous British medical weekly, to further his ideas.

We have quoted on previous occasions from this little bulletin, which appears quarterly and which abounds in well-written biographical sketches and anecdotes dealing with illustrious individuals in medical history, both in Canada and abroad. Many arguments are advanced in discussing the merits or otherwise of group practice, but a forgotten one, which might well be a major reason for favouring group practice, is the stimulus which can be given, as in this instance, to the cultural side of life. The monthly "Historical Nights" at this clinic have achieved wide fame.

To return to Thomas Wakley: the condensing of Dr. Scarlett's well-written biographical article to the limits of this page necessitates the deletion of many of the finer passages of his article, particularly wherein he discusses the social conditions prevailing at that time.

Young Thomas Wakley, a "West Country" man, was studying medicine in St. Thomas's and Guy's about the time that General Brock was defending Queenston Heights. On graduation this son of a gentleman-farmer found little opportunity of getting a toe-hold in London, even though he did rise at 4 a.m. to study. Fellowship in the Royal College of Physicians was only available to those having a degree from Oxford or Cambridge, which meant family

position and wealth. Also one must be a member of the Church of England, for no dissenter could be a Fellow. All hospital appointments were made by this body of Fellows, personal influence weighing heavily. Hospital appointments in surgery in like manner were selected from the Fellows in the Royal College of Surgeons. These men saw to it that their friends and relations were elected to all important posts. Purchase and influence, not merit, counted in medical advancement.

Early Days

Resenting all this, Wakley purchased a West End practice at the top of Regent Street. Married in 1820, he started his career. All went well for six months, and then, at one-thirty a.m., he was murderously assaulted in his house by a group of unknown thugs and his house burnt to the ground. Apparently it had been rumoured that he had been the actual hangman in disguise when five members of the notorious "Cato Street Conspiracy" gang had been hanged, drawn and quartered for a planned assassination of the Cabinet members of the day.

It was a very trying experience for Wakley and to make matters worse the insurance company accused him of incendiarism and refused to pay. He obtained a judgment, but his home and practice were gone and continuous slanders did not improve his lot.

At that time he made the acquaintance of William Cobbett, the great reformer and the most powerful political writer of his day and, through him, met other reformers seething with the ideas and spirit of Tom Paine. This was the turning point in Wakley's life, for the soul of the reformer stirred in the restless, disappointed young man. With quick decision he determined to launch a weekly newspaper to disseminate medical information and to expose

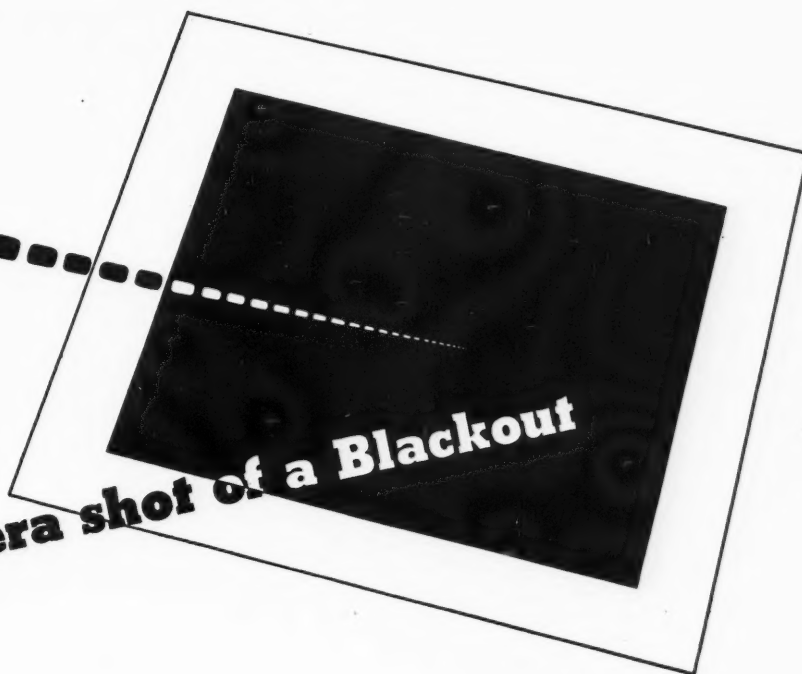
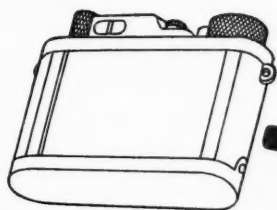
the medical evils of the day. Thus was born *The Lancet*.

The first number appeared on October 5th, 1823. It was such a peppery number that after the second issue the printers left their name off to avoid libel and notoriety. The editor's aims, as publicly stated, were "to disseminate medical information; to declare war on the vested medical interests; to expose the family intrigues influencing appointments in metropolitan hospitals and medical corporations; to improve medical education; to defend the rights and good of the general body of practitioners".

He followed these aims and ideals with vigour and courage. For ten years there was a pitched battle between Wakley and the privileged medical classes. He was opposed by hospital physicians and surgeons, the officials of the medical societies, the heads of the Colleges and the leaders of medical education. In the first decade he fought ten libel actions. In all, £8,000 were claimed for damages and the Courts only awarded £155, the militant editor's costs being entirely defrayed by public subscription. The new journal prospered.

He issued shorthand reports of hospital lectures—a startling departure, and obnoxious to most of the lecturers. When John Abernethy, senior surgeon at Bart's, tried to get an injunction against him, he lost the case and Wakley continued to publish them. He issued hospital reports, commenting on notable operations in the London hospitals. For that he was expelled from St. Thomas's Hospital. He retaliated by calling the three surgeons who authorized the expulsion "the three ninny-hammers" and their work "hole-and-corner" surgery. He was sued for £2,000 and was assessed £50.

Then he went after the administration of the metropolitan hospitals and

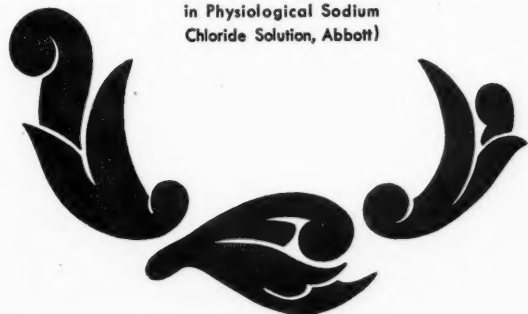


Candid camera shot of a Blackout



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the Royal College of Surgeons. He employed bright senior students to write reports for him. Cases of malpractice were given in full and all names published. In 1828 he reported a bungling lithotomy by Mr. Bransby Cooper, a surgeon at Guy's and nephew of the great Sir Astley. It was a terrific indictment. Written in drama form, it covered several acts, with the post-mortem as the epilogue. "It will doubtless be useful to the country 'draft' to learn how things are managed by one of the privileged order—a hospital surgeon—nephew and surgeon—and surgeon because he is a nephew." Although again the resulting lawsuit cost Wakley £100, he obtained a solid public following and, at a public meeting of sympathizers, the damages and costs were contributed in full.

He then went after the College of Surgeons, which had been organized on an oligarchic basis. He began an agitation to have Parliament authorize a new constitution, giving the voting privilege to all members. Naturally the country surgeons supported him very strongly. Gradually the reform for which he pressed came into being.

By 1835, when he was 40 years of age, he had achieved many of his objectives and had a tremendous following, both in the profession and among the public. With much still to be done, however, he decided to carry medical reform to Parliament, and in that year, backed by Cobbett, was elected for Finsbury, a London constituency.

Although Wakley was hopelessly middle-class among the elegant Tories and Whigs of the House—and a vulgar journalist at that—he soon made his presence felt. He became a national figure when he championed the cause of the "Tolpuddle Martyrs" in the House of Commons. Farm labourers at that time were most shamefully oppressed and when, in self defence, a small group of them near Dorchester formed a "Friendly Society" they were arrested, tried by a biased jury and judge and sentenced to seven years' penal servitude in Australia and Tasmania. The public everywhere were aroused by this arrogant intolerance on the part of the landowners, and Wakley became their champion. Although full pardon and the return

of the men was not achieved for some time, his two-and-a-half hour speech to the House when he presented a monster petition was the turning-point in the campaign for their release.

Among his many parliamentary achievements was the introduction and passage of a bill which provided for adequate and proper registration of medical practitioners and which has since become the legal basis of English medical practice.

Wakley as Coroner

In *The Lancet* he had been preaching that the formal inquest of the day was a dreary farce. He urged that the coroner be a medical man and quoted many instances to prove his argument. Finally, in 1839, he was himself elected coroner for West Middlesex and proceeded to practise what he had preached. The number of inquests was increased. He investigated all deaths in public institutions, asylums, prisons and poor-houses. He increased the list of cases which must be notified to the coroner, despite tremendous criticism. He insisted upon notification of all women dying in labour or a few hours afterwards. He was determined, he said, to protect the public against incompetent medical practice, ignorant midwives and enterprising quacks. He endeavoured to raise the status of coroner's juries and the whole tone of proceedings at inquests. His investigations at inquests were most thorough and exhaustive. Charles Dickens served as a member of one of these juries and praised Wakley very much for his handling of the popular court.

In 1851 he launched an analysis of foodstuffs, and published the results in "The Lancet". This led to a Parliamentary investigation and the passing of the Adulteration Act in 1860. He was equally effective in his exposure of charlatans. The famous John St. John Long, who had developed a great following with his cure for "consumption" and lived in great style in Harley Street, was brought to justice through Wakley's efforts.

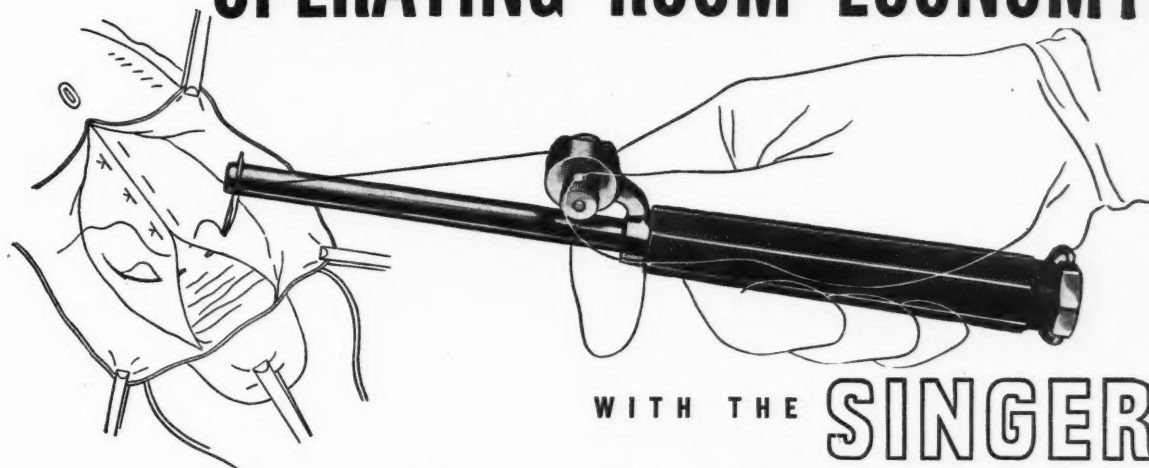
He was a man of tremendous energy, working fifteen to sixteen hours a day, driving between office and editorial duties, inquests and House of Commons, and working on

an improvised table in his carriage. A big, hearty man, handsome, always ready for an anecdote and without venom or malice off the field of battle, he enjoyed a great personal popularity, even among those whom he criticized. "Personally he was a cheerful, hearty and plain-spoken man—none of your sour, quarrelsome fellows hugging reform to a misanthropic breast." His pace, however, began to tell in time. In 1860 he developed a cough and hemoptysis, and although he improved for a while he had a sudden pulmonary haemorrhage, causing death in 1862, in his 68th year.

Dr. Scarlett describes him as a practical reformer, and not merely a prophet thundering his denunciations in the market place and then gloomily retiring to his cell to brood on the future of men. He was one of the first great editors who have made the Fourth Estate a power in the world. Journalism as he practised it was leadership. He not only wrote but he carried his ideas through to action, first in organization and personal example, and then by Parliamentary action.

To quote Dr. Scarlett: "He presents the singular phenomenon of being a medical man and at the same time a reformer. Physicians are seldom iconoclasts and for the most part they have been content to allow society to force the changes in medicine. Here was a man who brought the critical judgment of his time to bear on his profession, and with something of the superb faith and fire of the greatest reformers of his race. Such men have been the salvation of the world in the past and are its hope in the future. With the prophets they may agree that 'the heart is deceitful above all things and desperately wicked', but at the same time the vision of a new heaven and a new earth never fails them. In every age they have been wrong-headed in many things, but with the shocks and explosions of their fire-works how magnificently do they light up the darkness of their generation! And always they fight consistently for social justice against narrow class privilege and personal selfishness. They constantly testify to the dignity of man. Thomas Wakley is a humble member in such ranks."

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Dangers from Sulfa Drug Use Reviewed at Inquest

A NUMBER of deaths in Ontario from the use of sulfa drug tablets resulted in a thorough inquiry being made by the Chief Coroner for Ontario, Dr. Smirle Lawson, at an inquest on April 27th following the death of a 34-year old Toronto accountant. The subject of the inquest, according to the verdict of the jury, died after attempting to treat influenza with sulfathiazole tablets left over from a prescription given a year previously for tooth infection.

Dr. W. L. Robinson, professor of pathology at the University of Toronto and chief pathologist of the Toronto General Hospital, stated that files showed that in 19 cases since 1940 sulfa drugs had caused or contributed to death; all but two of these had occurred since 1942.

A number of leading consultants and specialists in the medical profession gave evidence at this inquest, to which considerable publicity was designedly given in order to warn the public. The increase in deaths in the last three years may be due to the increase in its use and not to any deterioration in the drug, Professor Robinson emphasized. Dr. C. N. Mooney, City Coroner, recommended that the sulfonamides be controlled more than at present. He agreed that they are a great blessing to humanity and would not like to see them given up because of misuse. "The public," he stated, "has the wrong idea altogether. Some persons seem to think they can be taken for every minor ailment, like aspirin." He understood that sulfa tablets were handed out to employees at some war plants; in fact he was asked by a nurse why they were not handed out at one of the plants which he supervised medically.

Wing-Commander F. R. Farquharson, professor of therapeutics at the University of Toronto, stated that damage is most often to the kidneys, liver, heart and blood; sometimes the results are fatal. In cases of sensitivity the drug should be used only when the value to be obtained fully warrants the risks.

"These drugs," he emphasized, "should never be used except with

careful supervision by a physician." Even then, he pointed out, it is not always possible to recognize the damage soon enough to prevent serious damage. Signs of sensitivity were often fever, skin eruptions, blood in the urine, occasionally the appearance of crystals of the drug and reduction of kidney elimination. Professor Farquharson stated that taking the drug often increased the danger of sensitivity. "One responsibility of the physician prescribing sulfa drugs should be to ask his patient if he has ever taken them before and if he was sensitive to them." Dr. Smirle Lawson pointed out that the dead man had taken sulfathiazole three times in the last year.

Dr. F. K. Detweiler, chief physician at the Toronto Western Hospital, warned that if damage occurs there is no way of reversing the process.

Dr. Julian Loudon, chief physician of St. Michael's Hospital, was of the opinion that doctors should write out the number of tablets and not prescribe more. Tablets left over in the home should be taken by the doctor or destroyed.

All witnesses were agreed that sulfa drugs had been miraculous in the treatment of pneumonia and wounds and for other purposes. In its verdict the jury stated that the public "should be warned of the danger arising out of the indiscriminate use of the drugs which, when properly taken, have proved so healing. We, therefore, recommend that they be taken only when prescribed by a doctor; that the doctor prescribe only the minimum amount; that unused quantities be destroyed when treatment is complete, and that as far as possible the patient should be under sufficient medical supervision and observation to determine if any untoward reaction develops while taking these drugs."

Rehabilitation Conference

(Concluded from page 41)

represented by Mr. R. F. Armstrong of Kingston and Dr. W. D. Piercey of Ottawa.

At this meeting it was agreed:

"That the Procurement and Assignment Board set up by a sub-committee consisting of a representative from each of the three groups—(a) Royal College of Physicians and Surgeons; (b) Canadian Hospital Council; (c) Association of Canadian Medical Colleges, and that each of these groups should conduct its own instigation as to what courses or services they could arrange for returned medical men and report back to the Procurement and Assignment Board."

It was also agreed:

"That, subject to the approval of the bodies concerned representations be made to the proper authorities that there be added to the Procurement and Assignment Board one representative to be named by each of the following groups—The Royal College of Physicians and Surgeons, The Canadian Hospital Council, and the Association of Canadian Medical Colleges."

Exact Duplicate of Quinine Now Developed Chemically

After almost a century of attempts by chemists to duplicate quinine, two American chemists, Dr. Robert B. Woodward of Harvard and Dr. William E. Doering of Columbia, have achieved success. The announcement has been made by the Polaroid Corporation. The new synthetic material is a precise duplicate of natural quinine and cannot be distinguished from it. In this respect it is quite unlike atabrine and plasmochin, now used as quinine substitutes although quite dissimilar in formula.

This discovery is of tremendous significance in view of the loss of the cinchona tree plantations in Japanese-held Netherlands East Indies and the increased demand for quinine to combat malaria in the tropical combat zones. There would seem to be some uncertainty, however, respecting the possibility of large-scale production of this substitute at the present time.

It is of interest to physicians also that quinidine, now widely used in heart ailments and available in diminished quantities only, is produced synthetically also in the artificial production of quinine.

Ultmost in Dependability Among Anaesthetic Agents

Time has seen the introduction of many new anaesthetic agents and some new techniques in anaesthetic practice. The use of some of these new agents and procedures requires knowledge of their pharmacological properties and special training in administration.

In use more than 100 years, anaesthetic Ether is as Romberger¹ states: "... the one reliable age-old standard by which all other agents, methods and results are judged; administered by experts and tyros alike many millions of times, it is susceptible to a hundred and one adaptations and combinations; flexible almost beyond imagination in the hands of those experienced ... it will probably remain, for many years to come, our most universally useful agent."

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¹ Romberger, Floyd T.: *J. Indiana S. M. A.* 35:613 (Nov.) 1942.

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Hospital Dietetics

(Concluded from page 30)

patients have been known to develop well-marked scurvy on this regime. Whenever it is prescribed, the synthetic vitamin in the form of ascorbic acid tablets should be given if serious deficiency symptoms are to be avoided. The increased danger from gastric haemorrhage when it is complicated by the presence of scurvy needs no emphasis.

The importance of water in the diet is being increasingly emphasized. Except in cases where fluids must be restricted, it is important that all patients should have an adequate fluid intake. It is unsafe simply to depend on the patient's thirst being sufficient to make him take enough to drink. Water or some liquid nourishment should be served to the patients at meals and at frequent intervals between. Except when it is contra-indicated by the diet ordered, milk should be served at least twice a day, and made available to the patient oftener if desired. In order to stimulate the patients' thirst, food served in ordinary diets should be

well salted. The salt tends to increase appetite as well as thirst, and is important in maintaining the body's supply of sodium. Well-salted food is more acceptable to the majority of patients.

The Hospital's Obligation

As mentioned before, the hospital's obligation to the patient is twofold: first, to supply a nutritious diet in sufficiently appetizing form so that he will eat it; second, to educate the patient to better food habits. From the latter viewpoint, whole wheat bread is preferable to Canada Approved white bread in ordinary hospital diets. There is no way for the patient to know that the Canada Approved bread he receives in hospital is not ordinary white bread, so no educational advantage is gained. On the other hand, if he is given whole wheat bread throughout his stay in hospital he may develop a permanent liking for it. At any rate, he will not leave with the mistaken idea that the hospital regards ordinary white bread as an acceptable item in the modern diet.

Wartime food restrictions and the

greatly increased publicity given to nutrition have made people more conscious of their food than ever before. Unfortunately, sensational advertising of synthetic vitamin concentrates and inaccurate articles on nutrition in newspapers and magazines have frequently resulted in a most undesirable type of food fadism. Too many people believe that by eating a pound of raw carrots a day or taking a capsule at each meal, they are attaining ideal nutrition. By serving sensible, nutritious meals and by supplying vitamins in the form of natural food stuffs rather than pills or capsules, hospitals can play an important part in combating such dangerous nonsense and educating the public in the sound principles of nutrition.

Maternity Wing Under Construction

Work has commenced on the construction of the Margaret Davis memorial maternity wing at York County Hospital, Newmarket, Ontario. The new wing will take five months to complete and will be of fireproof construction throughout.

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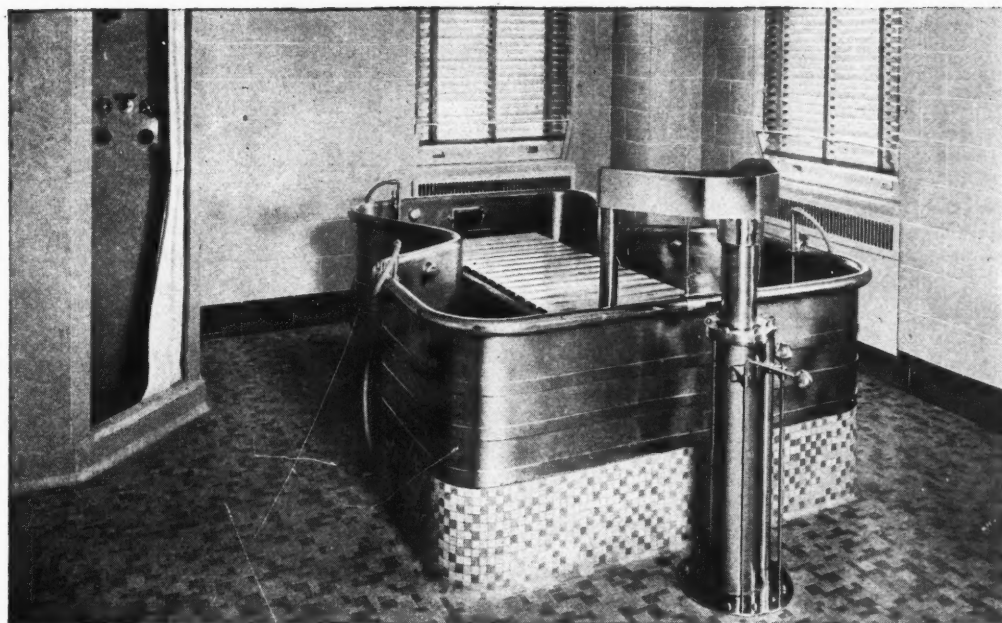
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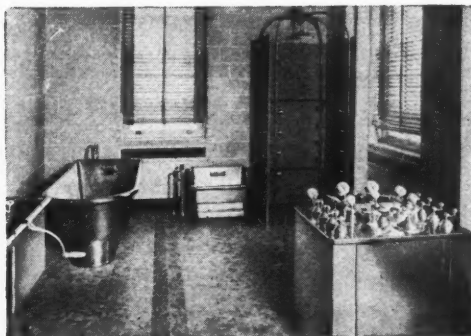
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Clinical Records

(Concluded from page 33)

pairs of twins of which one or both members had pyloric stenosis we were able to demonstrate the genetic basis of this condition (Ford et al. '41). It is strongly urged that detailed descriptions of twins, triplets, quads and quints be written into all medical records.

In this same study, medical records were again fruitful since it was possible to assemble from them data on the order of birth of the affected children and then statistically to show that more first-born children have pyloric stenosis than at any other order of birth (Ford et al. '41). Hence the unfavourable prenatal environment associated with the difficulties of the first pregnancy is shown to be an etiological factor inducing the condition of pyloric stenosis. Both hereditary and environmental factors operating together are responsible for the condition.

In conclusion I wish to thank the medical librarians who with enthusiasm assisted in our investigation. Without medical records the worker

in Human Biology is sadly handicapped; with these records his path is clearer. Moreover he can go back into the dead past as well as into the living future.

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Hoppe-Seyl. Z., 227:169.
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Amer. Jour. Dis. Child., 61: 41-53.
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Inheritance of Phenylpyruvic Amentia (Phenylketonuria). *Lancet*, 229(1):192.

Price Trends

(On basis 1926 = 100)

	Yearly Average 1943	April 1943	March 1944	April 1944
Building and Construction				
Material	121.2	119.1	127.3	127.3
Consumers' Goods				
(Wholesale)	97.0	96.9	98.0	97.9
(On basis 1935-1939=100)				
Cost of Living	118.4	117.6	119.0	119.1

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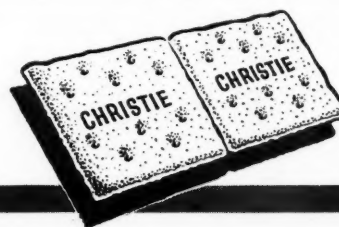
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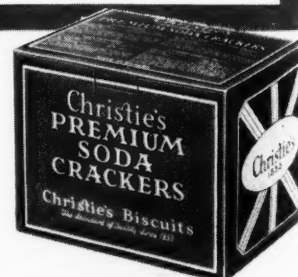


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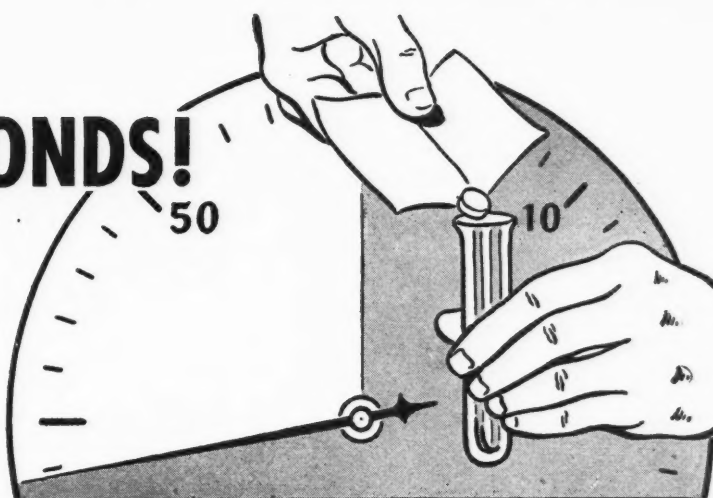
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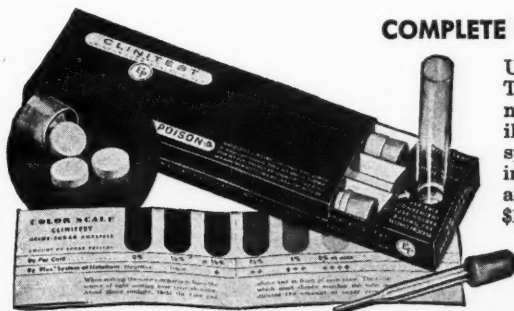
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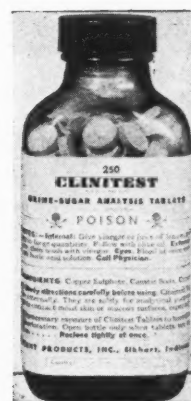
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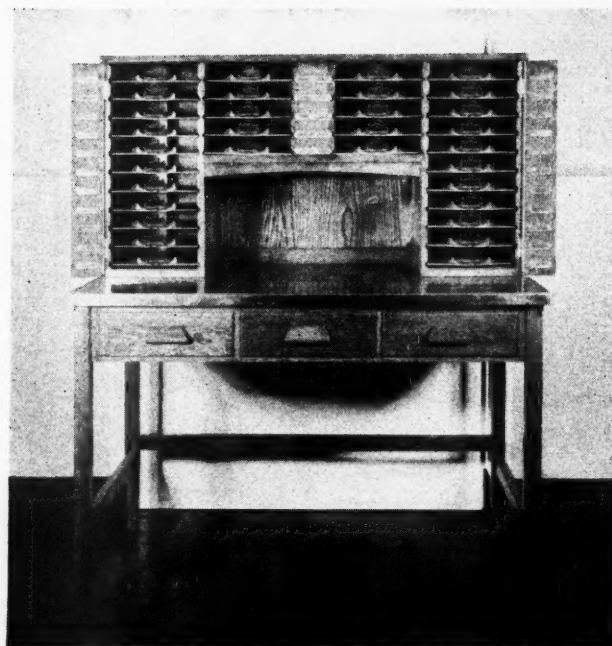
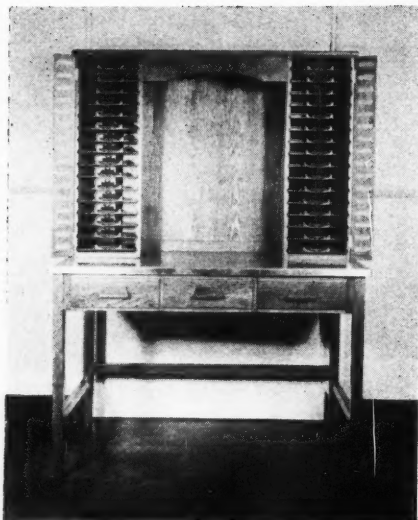


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A Home-made Improvement



The illustrations above have been sent to us by the Vancouver General Hospital as an example of how a piece of standard equipment may be altered to fit individual needs. The photograph on the left shows a nurses' chart desk, as manufactured by a leading Canadian manufacturer. Of it the superintendent, Dr. A. K. Haywood, says: "The only objection

was that the nurse could not reach the upper recesses without getting off her chair. The one shown above is the result of our own carpenter staff getting to work on this piece of equipment. It is very easy to recognize what they have done and this piece of equipment has now turned out to be a very excellent nurses' charting desk."

Lack of Action at Ottawa Criticized

Dr. Wilder D. Penfield, director of the Montreal Neurological Institute, criticized the Federal government in an address at the Institute on May 29th for not providing adequate beds to overcome critical hospital congestion. "The Canadian Government", he stated, "has done practically nothing to establish special centres for the care of war injuries to the nervous system; nothing at all in Quebec and the Maritimes."

The Neurological Institute was designed for 47 patients. Since the outbreak of war the hospital has been doing urgent neuro-surgery from Newfoundland and Halifax and even further afield. It has more than doubled its bed accommodation with no increase in space. Recently as many as 100 patients have been in the Institute at one time.

Dr. Penfield stated that the overcrowding was due to the press of urgent "life-and-death" cases coming

from such sources as airports, munition factories, the R.A.F. Transport Command, the Merchant Marine and the Armed Forces.

The surgeon stated that the Canadian Government had turned down a proposal to build a wing to the Montreal Neurological Institute after the listitute had offered its services for overseas casualties. The proposal was turned down for "fear of the establishment of an embarrassing precedent".

"It seems possible," Dr. Penfield continued, "that returning service men with wounds of nerves and spine and head may think little of embarrassing precedents and much of their chance to regain their health."

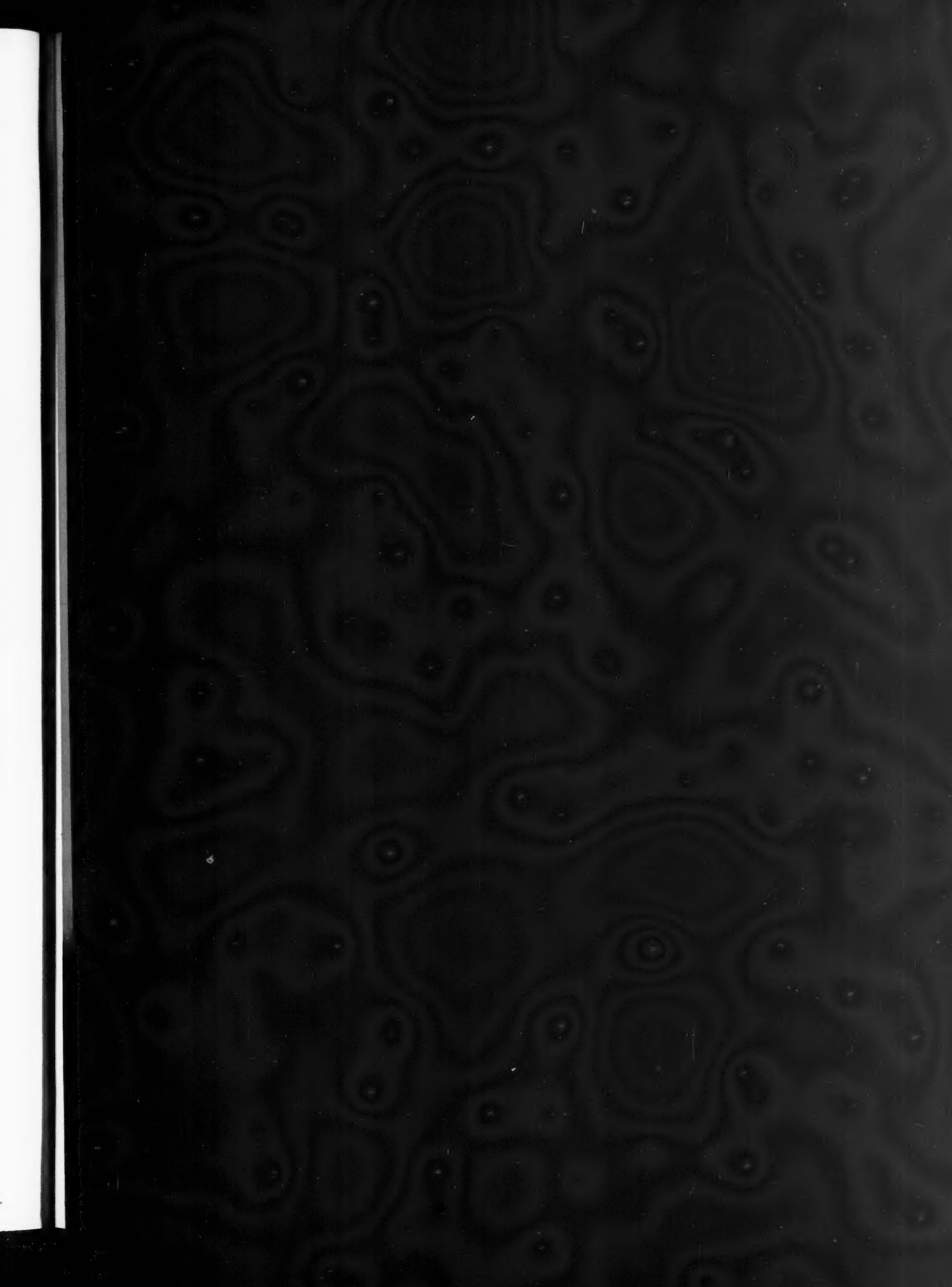
Questioned in the House concerning Dr. Penfield's remarks about the lack of hospital accommodation for those in the Services, and particularly for neurological cases, Pensions Minister Ian Mackenzie stated that

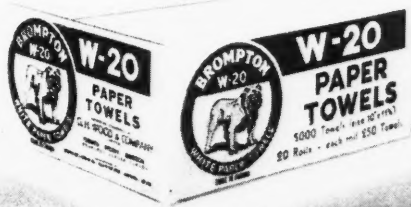
Canada now has five centres for the care of neurological cases from the armed forces, with one in Montreal.

Mr. Mackenzie said that 23,000 beds are being operated for the forces. The Pensions Department itself is now operating 8,450 beds against 2,700 when the war started. It will have 10,000 beds by the end of this year and 15,000 by the end of 1945.

Referring to neurological patients he said that in addition to the co-operation of Dr. Penfield and the Montreal Institute "the three armed services, in co-operation with the Department of Pensions and National Health, have set up four additional centres in other parts of the country. The beds are in pension and national health hospitals, and the staffs have been provided very largely by the armed services."

He added that the Cabinet had just given its approval to the purchase of a site in Montreal for the
(Concluded on page 60)





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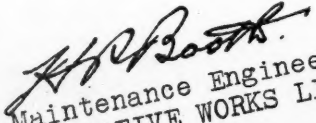
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Book Reviews

SMALL COMMUNITY HOSPITALS

—By Henry J. Southmayd, Director and Geddes Smith, Associate of the Division of Rural Hospitals of the Commonwealth Fund. Published by the Commonwealth Fund, 41 East 57th Street, New York 22, N.Y. Pp. 182. Price \$2.00 (in the United States). 1944.

This study of small community hospitals is based upon an unusually wide experience. The Commonwealth Fund has made a special study of small hospitals over a period of nearly twenty years, and in that period Mr. Southmayd and those associated with him in the small hospital activities of this organization has amassed a considerable knowledge with respect to the needs and use of these hospitals.

This book is not a practical manual to provide working drawings and to dispense with the services of an architect. On the contrary the authors deal, in the main, with the underlying principles that should be borne in mind by any committee planning the development of a rural hospital and working out the factors that would contribute to its successful operation. The illustrations, which are not numerous, are diagrams of departmental relationships, showing in a broad way how the different floors should be laid out to provide the best internal grouping of facilities. The authors wisely leave the details for local adjustment.

From a perusal of this book one gets the impression that the authors have taken the viewpoint—and rightly so—that the development of facilities to meet the needs of the community and to so develop the hospital that it has functional efficiency, are more important than to focus attention too much upon the actual details of construction. This is not an idle theory, but is based upon actual experience in the building of some 13 rural hospitals and in the general supervision of their operation. Emphasis is laid upon the relationship of the rural hospital to its community, to the medical profession of the area served and upon basic principles of organization and administration. There is a chapter on hospital finances and one on the hospital plant itself. This contains much valuable information for the guidance of committees. The final chapter reviews the many considerations essential in adapting the hospital to the particular needs of the area served and in maintaining flexibility for future changes in social relationships. The appendix contains suggested rules and regulations for the hospital and also for the medical staff. The A.C.S. minimum standard is also in the appendix. It is an excellent little volume and one that would prove invaluable to any group desirous of setting up a hospital or of revamping existing hospital facilities to meet the needs of the area.

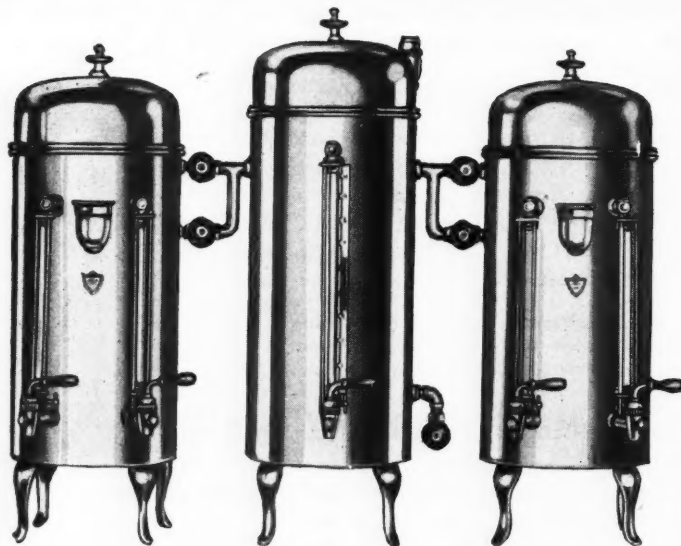
MEDICAL CARE OF THE DISCHARGED HOSPITAL PATIENT

—By Frode Jensen, M.D., H. G. Weiskotten, M.D. and Margaret A. Thomas, M.A. Pp. 94. Price \$1.00 (U.S.) Published by The Commonwealth Fund, New York, 1944.

This is a study undertaken at the Syracuse University College of Medicine which illustrates the value of adequate medical care for those discharged from hospital. In view of the fact that 90 per cent of the cost of service on the general medical wards at the University Hospital was for chronic illness, this study was made to determine what could be effected by more intensive medical and other aftercare than had previously been possible. With the co-operation of various social welfare and other organizations, it was shown that so many patients could be discharged earlier and re-hospitalization could be sufficiently reduced to effect a saving of \$29,000 in 19 months, three times the cost of the experiment. Of more importance, the patients received much better care. The points are well illustrated with concise case histories, and the appendix contains relevant statistical analyses and a helpful bibliography. It is a stimulating study. (See Editorial.)

Dietetic President Named

Miss Charlotte Large of Montreal was elected president of the Canadian Dietetic Association at the recent annual meeting in Vancouver.



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*Bower, John O. et al.: *American Journal of Surgery*, 47:20, 1940.

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Psychic Factors in Medicine
Stressed by D.G.M.S.

Speaking at a luncheon devoted to military matters at the convention of the Canadian Medical Association, Major-General G. B. Chisholm stressed the importance of considering the psychic effects of illness on the individual. "After a few weeks in hospital", he stated, "the patient is never the same again." Even a fracture of the femur soon becomes a psychosomatic disease. This viewpoint is being taken by the medical officers, to the distinct advantage of the patients.

"The time lost in the navy through hospitalization averages but 9½ days per person", stated Surgeon-Captain A. McCallum, head of the R.C.N. Medical Services at the same luncheon. This he considered excellent in view of the type of work, the exposure and the insecure footing encountered in work at sea. Analyzing the ages of the medical officers in the Canadian Navy, he reported:

Under 25 years	4%
26-30 years	51%
31-35 years	25%

36-40 years	10%
41-45 years	7%
46 and over	3%

There are now 366 medical officers in the Canadian Navy, of whom some 60 per cent are afloat.

"By June", stated Air Commodore J. W. Tice, "the R.C.A.F. will have ten convalescent hospitals across Canada." It was his opinion that the Air Force was "making a distinct contribution to this neglected field of medicine".

Lack of Action Criticized
(Concluded from page 54)

construction of a 500-bed hospital at an estimated cost of \$1,800,000, for the use of the armed forces. The hospital will be reasonably close to the centre of the city and accessible by the leading specialists from the medical colleges and from private practice, while yet being out of the area of greatest congestion. It is also quite close to Montreal West Station for the receipt of patients from overseas convoys.

City Medical-Hospital Plan
Proposed for New York

A municipally-sponsored medical-hospital care prepayment plan has been proposed by Mayor La Guardia of New York. This would cover all persons who make not more than \$5,000 a year, including city employees, and would be on a voluntary basis. It would be administered by a non-profit corporation which would charge four per cent of the individual's income, with the suggestion that the employer pay half.

No schedule of physicians' fees has been indicated, nor have rates of payments to hospitals, although the suggestion has been advanced that workmen's compensation rates might be used as a basis, unless existing prepayment plans, including the Associated Hospitals Service, could be integrated with the city plan.

It is feared by many who have studied the plan that a flat percentage of income, such as the proposed levy, would bear unfairly on those in the higher income brackets and that, on a voluntary basis, such people would be less willing to enroll.

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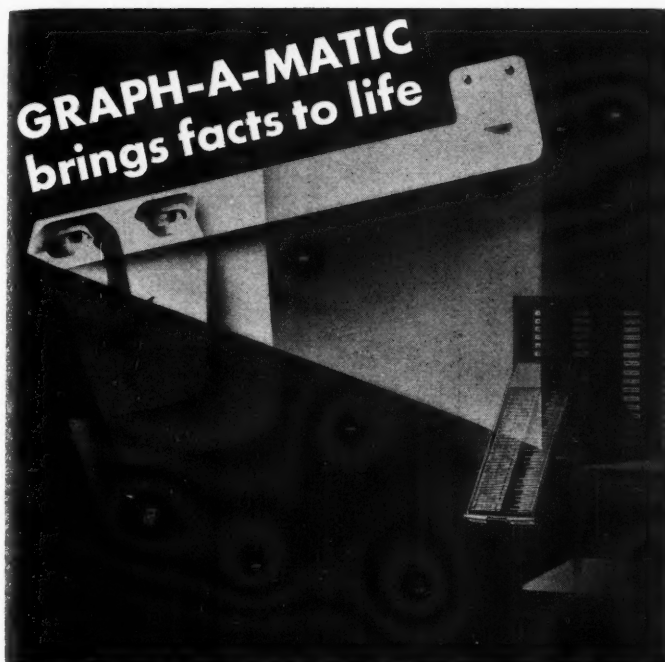
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CITY PROV.

New Hotel Dieu for Edmundston

A four-storey, 200-bed hospital and an adjacent nurses' home will be built at Edmundston, N.B., by the Hospital Nuns of St. Joseph at a cost of about \$600,000. The institution will be named Hotel Dieu.

Bayer Company Must Share Profits With Nazi Trust

In a judgment given recently at Osgoode Hall (Ontario), the Bayer Company of Canada, well known makers of aspirin, must continue to pay half of its net profits to the German chemical firm, I. G. Farben. Since 1939 the I. G. Farben profits, now running into six figures, have been paid to the custodian of enemy property. The Bayer Company Limited brought suit in Windsor in March to have the contract dissolved, and named the I. G. Farben Corporation of Frankfurt-Am-Main, the Farbenfabriken Vorm Fried Bayer & Company and the custodian as defendants.

In the judgment it was pointed out that the plaintiff had agreed for 50 years to pay the original German company one-half of the net profits

and that the contract would ordinarily run to 1973. The plaintiff received ingredients shipped from Germany for the aspirin it had made. In 1926 the Farben Corporation took over the contract. The judgment stated that the evidence showed that from 1936 on the materials supplied plaintiff were adulterated, containing wood splinters, talc and rust. The plaintiff later obtained materials from its parent company in the United States.

Although it was obvious that the court did not think very much of the I. G. Farben Corporation, Mr. Justice Urquhart refused to dissolve the contract. Referring to the I. G. Farben, he said: "It has been likened to an octopus, with its tentacles spread out not only to all European countries but also to the United States and other parts of the western hemisphere. What part it has played in the war, and in fact in causing the war, can be left to one's imagination."

It will be recalled that during the last war the right to use the term "aspirin" was given to other makers of acetyl-salicylic acid, but after the

war the Bayer Company succeeded in having that name restricted to its own product.

Hospital Staff Supports Statements of Dr. Bruce

The medical staff of the Toronto East General Hospital has sent a letter of congratulation to the Hon. Dr. H. A. Bruce, M.P., for his stand before the Special Committee on Social Security in opposing the demand of drugless practitioners that they be included in the lists of medical practitioners eligible to treat participants in the proposed Health Insurance plan.

The medical staff takes the viewpoint that these lists should comprise only practitioners licensed by the respective Colleges of Physicians and Surgeons. These licensing bodies are quite competent to protect the participants against would-be practitioners with insufficient knowledge and training.

A parallel statement, indicating their support of the stand taken by Dr. Bruce, was sent to the Hon. Cyrus MacMillan, Chairman of the Special Committee.



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**HOSPITAL ACCOUNT
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As One Professional Man To Another ...

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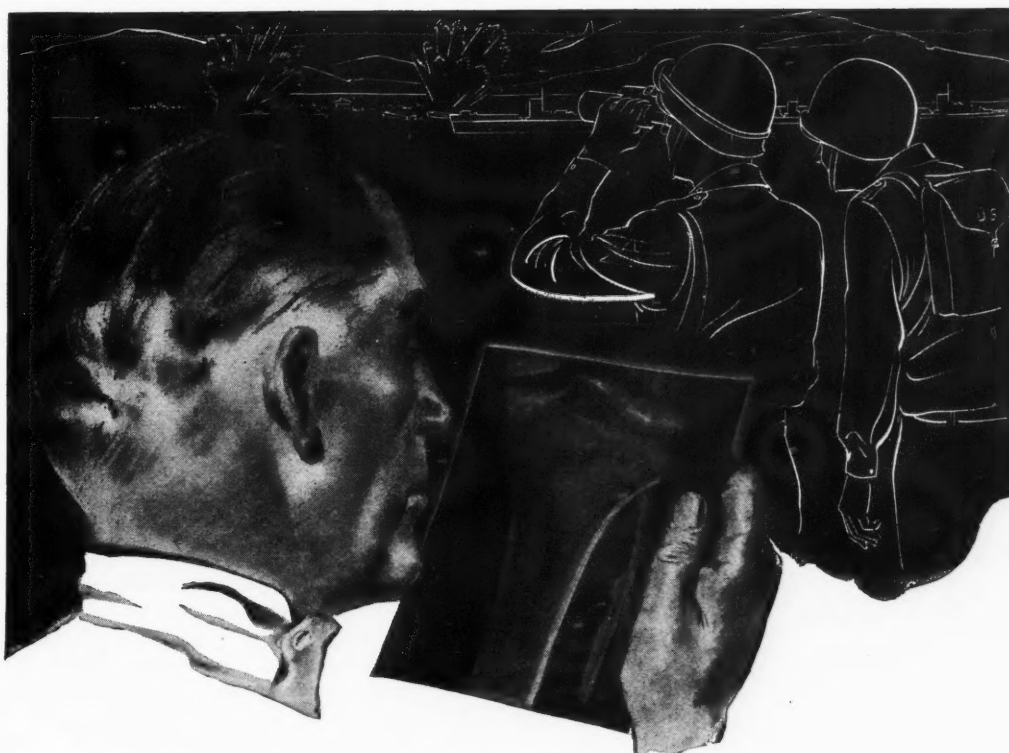
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Patterson Screens

Light the path of X-Ray

Better Things for Better Living . . . Through Chemistry



Standards of Nursing

(Concluded from page 35)

taining nurses in key positions. Staff education conferences provide an opportunity for the discussion of common problems and promote understanding and loyalty.

Enrolment of Student Nurses

Schools of nursing of good standing have been encouraged to enlarge their student enrolment. Recruitment programmes have been established and methods of interviewing potential nurses have been improved. Loud voices have been heard calling for a lowering of entrance requirements, so that students in greater numbers will be available. I repeat, however, that standards should not be lowered. Rather, the greatest precautions should be taken to select candidates with the highest possible educational and personality qualifications, so that when trained they will make capable nurses and uphold the professional standards of nursing. There remains the responsibility of providing a good quality of teaching and educational opportunity for these young women who are choosing

nursing as their career. Therefore, no greater numbers should be accepted than can be adequately trained.

Auxiliary Personnel

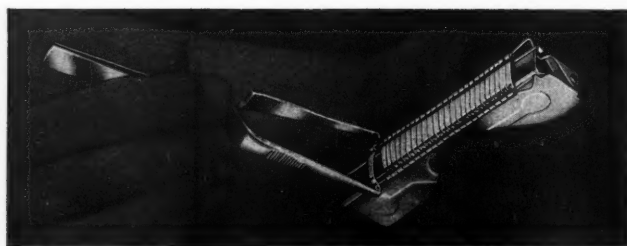
Nurses' aides, ward helpers, ward clerks and volunteers should be fitted in and used to carry out many non-nursing duties. This will contribute towards the maintenance of nursing service while at the same time saving the nurses' time for nursing care. Much detailed planning is required where these workers are allocated. Careful supervision of their work must be provided to ensure helpfulness and safety. While in the present situation a wider use of subsidiary workers is advocated, the difficulty remains of securing personnel who will work efficiently without constant supervision.

Conservation of Nursing Service

Education given through press and radio to the public, the hospital's potential patients, should lead to co-operation in maintaining standards, even if service has to be reduced. Patients and their relatives can lessen their demands on nurses. The de-

livery of flowers to hospitals at stated times; the restriction of visiting hours; the admission of patients by a certain time in the afternoon; the revision of medical and nursing procedures, and the modification of treatments—all these conserve nursing service.

Directors of nursing are faced with the responsibility of seeing that normal services are maintained during the war period. There is no ready-made solution to this problem. Emphasis must be placed on standards. Principles must be maintained, though policies and procedures may require change. If all are thinking, pooling ideas, working together and putting forth their best effort, much can be accomplished. Character and intelligent flexibility, with the spirit of service, will win achievement beyond our hopes. The provision of measures which promote satisfaction and security for the individual—team work among all members of the group and encouragement from the captain who guides the ship and steers a straight course—will all contribute towards meeting the present situation as fully as possible.



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As an aid in conserving the limited supply of wound clips now available, it has been suggested that a wire of clips of each size that you use be placed each on one of the Bowen-Adams Wound Clip Racks where they are ready for use and protected from damage. The wound clips not used during an operation will remain on the Rack and are ready for use for subsequent operations. In this way, the tendency to discard the unused portion of a Rack of clips is minimized.

B-2339/SS Bowen-Adams Wound Clip Rack, made of Stainless Steel. Each \$2.40

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Representatives Everywhere

Hospitals in China

(Continued from page 28)

Their buildings are usually quite substantial and, what cannot be so readily estimated in one short visit, each of the hospitals which I have seen—and I have seen most of them—has had that priceless thing, a tremendous energy and drive. There is a great opportunity in the diagnostic sphere to convert these hospitals into diagnostic clearing stations, where clinical laboratory work could be done for a very large group of medical practitioners in that area. Nearly all these hospitals are painfully lacking in accommodation, and if this can be increased also the other standards are quite adequate. In other words, here is a nucleus for a Federal Government health service.

Provincial Hospitals

Aside from Federal Government highway hospitals there are also numerous provincial hospitals. The quality of both the hospitals themselves and the services which they can render varies a great deal in different provinces, but even at its best, because of financial limitations, the

provincial hospital is as yet far from satisfactory and extremely far from being adequate. It has been possible, however, to build, equip, staff and operate a provincial government hospital in each of the three or four largest cities of a province. If there are teaching facilities near at hand the co-operation between hospital and school becomes automatic when they are both under provincial administration. If finances will permit it, it will probably be in the provincial hospital scheme, that China will solve her medical problem. With a compulsory term of national service for every medical graduate in China, both male and female, many of those drafted elect to take their service in these provincial hospitals. This has given these hospitals rather better staffs, both in doctors and nurses, than they would otherwise be able to attract to them. It is quite probable that such compulsory national service will be carried over into the post-war era. Again, these hospitals have greater difficulty in obtaining supplies than have the Federal hospitals. Their budget is still less adequate and the supplies and equip-

ment for these hospitals will probably have to be provided in the near future from "Mutual Aid" and philanthropic sources.

Military Hospitals

The military hospital represents the black sheep of medical service in China. Except for a few senior posts it can be said that the Army Medical Administration has been unable to attract qualified doctors to its service. This has gone on for many years, growing continually worse, so that to-day there are few military hospitals in China where services above those of a casualty clearing station are available. Few of them are either equipped or capable of doing any major operation other than the amputation of limbs. The standards of sterile technique are appallingly low. There is an abysmal lack of diagnostic facilities—yet the load on these hospitals has always been heavy and is steadily increasing. The future promises an increase in this load.

Mobile Teams

Conditions existing in such a series—
(Concluded on page 68)



"Gentlemen, may I ask—which is PEEL and which is POTATOES?"

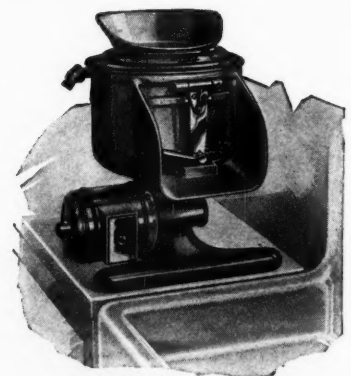
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This was written ten years ago when 'Dettol' was first introduced to the British medical profession. Within three years the incidence of hæmolytic streptococcal infections at Queen Charlotte's Hospital had fallen by over 50 per cent.—and this dramatic decline was authoritatively attributed to the use of 'Dettol', which was the only change

made in the antiseptic procedure.* Today, this antiseptic is preferred before all others in British hospitals and homes.

There can be no frontiers to the advance of medicine. The vast clinical experience in the use of 'Dettol', published in scientific papers and in standard textbooks, has inevitably influenced medical opinion and practice throughout the British Empire. Thus, in nearly every maternity hospital in Canada, 'Dettol' is now helping to win the unremitting campaign against puerperal sepsis. And it is becoming increasingly evident that the unique combination of qualities which make 'Dettol' the antiseptic of choice in obstetrics must also commend its use in all the contingencies, medical and surgical, which call for unfailingly effective, safe, painless and pleasant antiseptics.

■ Colebrook, L. (1933) *Brit. med. J.*, 2, 725.

* Colebrook, L. (1936) *J. Obstet. Gynaec.*, 43, 691.

Hospitals in China

(Continued from page 66)

vice, where the budget never keeps up with the rising costs, present a rather discouraging picture, and the problems faced in raising the standards of these institutions is a very complex one. Probably the most satisfactory solution so far discovered is that of having auxiliary teams from outside agencies attached to these military hospitals. These are mobile operating or mobile medical teams from such agencies as the Chinese Red Cross, the New Life Movement and the Friends' Ambulance Unit. Such a team, which may number anywhere from four to twenty people, can do a great deal to improve the quality of technical service offered by the military hospital. For instance, in the Friends' Ambulance Unit, which has three teams in military hospitals at the front in China, we use from eight to twelve people per team. On such a team there will be from two to four doctors, an anaesthetist, an operating-room assistant, a ward nurse, a dietitian, a laboratory technician with his equipment and an x-ray power

plant and technician to operate it. This team brings with it its equipment for field surgery, including sterilizers of course. Thus with a small number of personnel and not being loaded down with any problems of discipline, finance or administration, they can devote their whole time to the medical-technical work of the hospital. Not only can such a team mop up the surgical cases and diagnose and begin treatment of the medical cases, but probably its greatest service lies in the training courses it can give to the personnel of the unit to which it is attached.

More Teams Needed

After two years' experience in this type of work I must say that probably forty or fifty such teams in China to-day could radically alter the whole picture of the care of the wounded soldier. Based on our experience also it seems to me that one of the great contributions towards improving medical services in China generally could be made by similar, although perhaps smaller, teams working in the Federal and Provincial government hospitals.

Three Ways to Help

Finally, then, it would seem that both during the war and in the post-war period Canadian hospital people and Canadian philanthropists can do a useful piece of work in the following ways:

First, to ensure a continuous flow of much-needed drugs and supplies.

Second, to contribute new equipment, not for expansion but merely for replacement of that worn out by seven years of war.

Third, to send from our countries both general and special teams to work in Chinese institutions for Chinese people. The special hospital for tuberculosis, chest surgery, orthopaedics and plastic surgery have all yet to be organized in China. No greater gesture, it seems to me, could be made in the international sphere than by doctors and nurses in one country contributing their special knowledge towards solving these vast problems for a neighbouring country. Surely global strategy must have its effect on the doctor and nurse as well as on the industrialist and statesman.



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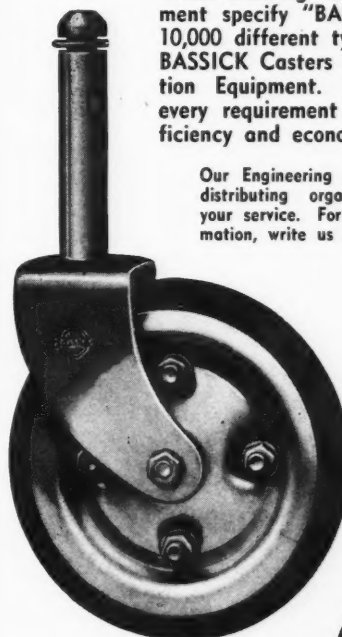
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Nurses Vote Fee Increase

At the recent general meeting of the Central Registry of Graduate Nurses, Toronto, members voted unanimously that fees of private duty nurses be raised from \$5 to \$6 a day for 8-hour duty, and that in private and apartment hotels and in homes a 10-hour day be permitted.

The fee for 10-hour duty will be \$7 and for 12-hour duty \$8. It is proposed that the increases go into effect on June 15th.

(Note: It has since been reported that these changes cannot be made under present regulations.)

Nurses' Residence Under Construction

Work has commenced on the new nurses' residence of the Digby General Hospital. The building will be a two storey structure. The ground

floor will comprise a foyer, living room, reception room, kitchen and kitchen nook, two nurses' rooms, bath, and superintendent's suite.

On the second floor there will be eight nurses' rooms, bath, linen closet and fire escape. The basement will contain three double rooms, living room and bath for maid's quarters, and a large storage and fuel room.

Construction of the building has been made possible through the generous gift of \$10,000 by Mr. Harry F. MacLean, Merrickville, Ontario.

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- June 20-22—Maritime Hospital Association, Admiral Beatty Hotel, Saint John, N.B.
- June 26-30—Canadian Nurses Association, Winnipeg, Man.
- June 26-30—First A.H.A. Institute for Hospital Personnel Management, Yale University, New Haven, Conn.
- June 26-30—A.H.A. Institute on Hospital Accounting, Indiana University, Bloomington, Ind.
- Sept. 18-29—Institute for Hospital Administrators, A.C.H.A., Chicago, Ill.
- Oct. 1-2—American College of Hospital Administrators, Cleveland, Ohio.
- Oct. 2-6—American Hospital Association, Cleveland, Ohio.
- Oct. 18-20—Ontario Hospital Association, Royal York Hotel, Toronto.

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2 hours after dilution	50 mg.
4 hours after dilution	50 mg.
6 hours after dilution	49 mg.
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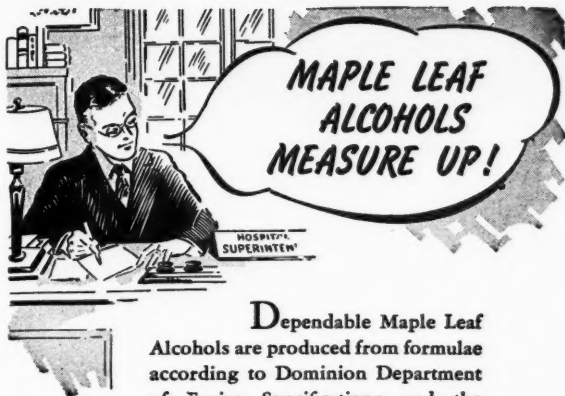
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